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ESTIMATING USAF AIRCRAFT RECOVERABLE SPARES INVESTMENT.(U)

AUG 80 K J HOFFMAYER, F W FINNEGAN

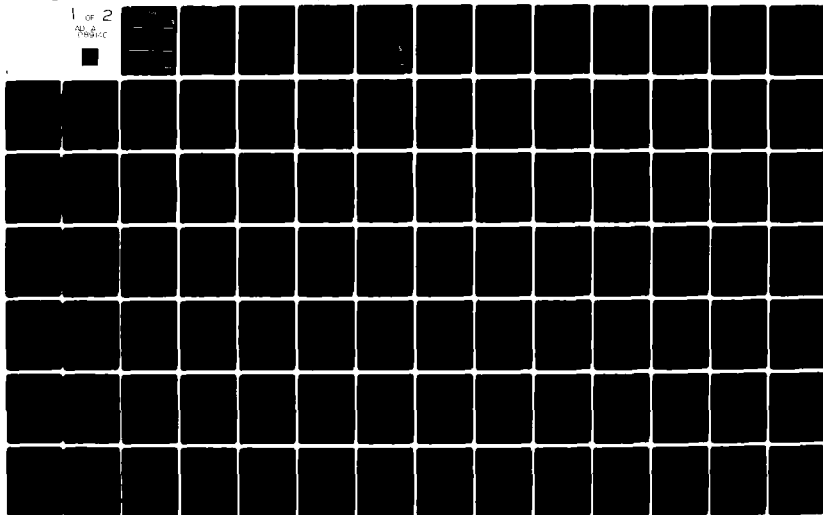
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Estimating USAF Aircraft Recoverable Spares Investment

K. J. Hoffmayer, F. W. Finnegan, Jr., W. H. Rogers

A report prepared for the
OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE/
PROGRAM ANALYSIS AND EVALUATION

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—> Presents a method, and the data used in its development, for estimating USAF aircraft recoverable spares investment cost at the major subsystem level. The investment estimated is in peacetime operating stock (POS) used to support specific mission/design/series aircraft. Estimating relationships are also presented for the replacement of condemnations. The estimating equations implicitly assume that recoverable spares for future USAF aircraft will be procured, managed, and applied as they were in the recent past. They were developed by regressing subsystem POS investment on candidate explanatory variables from sets of data relating to aircraft or subsystem characteristics, activity, deployment/support/supply, and cost. A logarithmic form was chosen for the regression models. The equations are designed for use at the earliest stages of USAF aircraft development when detailed statements of individual spares requirements are not yet available. They were derived from data on 16 USAF aircraft for which production and deployment were nearly complete. 168 pp.
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Estimating USAF Aircraft Recoverable Spares Investment.

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K. J. Hoffmayer, F. W. Finnegan, Jr. & W. H. Rogers

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A report prepared for the
**OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE/
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PREFACE

At the request of the Office of the Assistant Secretary of Defense, Program Analysis and Evaluation (PA&E), The Rand Corporation has undertaken to update and extend a method Rand developed in 1976 for estimating United States Air Force aircraft recoverable spares investment. Rand's approach is statistical or historical rather than normative because of the fundamental assumption that USAF spares procurement will be the same in the future as in the past.

This report describes estimating models developed from multiple regression analyses on selected sets of explanatory variables. It is intended for use by Department of Defense resource managers to evaluate the resource effects that recoverable spare parts demands will make when new aircraft enter the operating inventory. The models are designed for application before the preproduction or deployment decision stages of USAF aircraft development when detailed statements of spares requirements are not yet available. The models can also be used to check on detailed computations of spares requirements at any time in an aircraft's life cycle.

The updated and extended methodology differs from the original in the following respects:

- o It is derived from a longitudinal and cross-sectional (1975-1978) rather than a purely cross-sectional (1975) data base.
- o It determines the peacetime operating stock portion of aircraft recoverable spares inventories and provides estimating relationships for such investment in airframe, avionics, and propulsion recoverable spares.
- o It includes the ability to estimate the investment needed to replace condemned recoverable items.

The recoverable spares investment captured by the estimating models does not include war readiness materiel, spare engines, or engine spare parts.

This research is part of a continuing effort to improve the methods available to the defense community for examining the effects of new weapon systems on resources.

The antecedents of this work are contained in a previous Rand study for PA&E on Service aircraft spares requirements and costs. This earlier investigation is documented in five unpublished working papers variously treating Service and Department of Defense spares and repair-parts policy, models for estimating USAF and Navy aircraft recoverable spares investment at the major subsystem level, and a methodology for estimating whole spare engine requirements for USAF aircraft.

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SUMMARY

This report presents a method, and the data used in its development, for estimating USAF aircraft recoverable spares investment cost at the major subsystem level: airframe, avionics (including armament), and propulsion as it relates to the air vehicle and not the installed engines. The investment estimated is in peacetime operating stock (POS) used to support specific mission/design/series aircraft. War readiness materiel, spare engines, and engine spares are not covered. Estimating relationships at the subsystem level are also presented for the replacement of condemnations (true replenishment) as is a discussion of spares investment during aircraft inventory buildup.

The estimating equations are statistical and implicitly assume that recoverable spares for future USAF aircraft will be procured, managed, and applied as they were in the recent past. They were developed by regressing subsystem POS investment on candidate explanatory variables from sets of data relating to aircraft or subsystem characteristics, activity, deployment/support/supply, and cost. A logarithmic form was chosen for the regression models.

In addition to the multiple regression equations and the statistics related to them, simplified sensitivity equations are provided that yield the approximate percentage change in spares investment as a function of the change in each of the explanatory variables.

The estimating equations are designed for use at the earliest stages of USAF aircraft development when detailed statements of individual spares requirements are not yet available. They were derived from data on 16 USAF aircraft for which production and deployment were nearly complete. Data were obtained from the "The Recoverable Consumption Item Requirements System," (D041) (AFLCM 57-3), the "Acquisition and Due-In System," (J041) (AFLCM 171-123, AFLCM 70-1), the "Aerospace Vehicle Inventory Status and Utilization and Reporting System" (AVISURS) (AFR 65-110), to 00-25-30, Technical Manual, "Unit Costs of Aircraft Guided Missiles and Engines," USAF Statistical Digests, and PAs, "USAF Program, Aerospace Vehicles and Flying Hours."

Information from the data-gathering phase of the study is organized in three appendixes.

- A. *Aircraft Recoverable Spares Investment*
- B. *Multiple Regression Analysis Data*
- C. *Flying Hour Materiel Program Item Condemnations, Costs, and Ratios.*

The material contained in these appendixes resulted from assembling and processing raw USAF data from the computerized and hard copy sources identified below:

- o D041 Create Depot Data Bank Records [computerized version of *The Recoverable Consumption Item Requirements System* (D041) (AFLCM 57-3)].
- o J041 Procurement History File [Computerized form of *Acquisition and Due-In System* (J041) (AFLCM 171-123, AFLCM 70-1)].
- o *Aerospace Vehicle Inventory Status and Utilization and Reporting System* (AVISURS) (AFR 65-110).
- o TO 00-25-30, Technical Manual, *Unit Costs of Aircraft, Guided Missiles, and Engines*, 1 September 1978.
- o USAF Statistical Digests
- o PA, USAF Program, *Aerospace Vehicles and Flying Hours*.

A detailed numerical example applies the equations and discusses the results.

ACKNOWLEDGMENTS

The authors wish to express their appreciation to Rand colleagues A. Barbour, J. Lu, and R. M. Paulson for their helpful comments and suggestions. They are particularly indebted to J. Wuchitech for her assistance in the data gathering phase of the study and to P. Masthay for her programming efforts.

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GLOSSARY

AFLC	Air Force Logistics Command
AVISURS	Aerospace Vehicle Inventory Status and Utilization and Reporting System
CAIG	Cost Analysis Improvement Group
DSARC	Defense Systems Acquisition Review Council
MDS	Mission/design/series
MSN	Master stock number
NOR	Not operationally ready
NORM	Not operationally ready maintenance
NORS	Not operationally ready spares
NSN	National stock number
OFM	Organization field maintenance
O&S	Operating and support
OSD	The Office of the Secretary of Defense
POS	Peacetime operating stock
TMS	Type/model/series
WMP	War and Mobilization Plan
WRM	War readiness materiel

I. INTRODUCTION

Since the mid-1970s there have been a number of projects to obtain better visibility of current weapon system operating and support (O&S) costs, and to reduce these costs. In its role as an advisory body to the Defense Systems Acquisition Review Council (DSARC) on all matters concerning the estimation, review, and presentation of cost analysis of future weapon systems, the Office of the Secretary of Defense (OSD) Cost Analysis Improvement Group (CAIG) is convinced of the need to quantify O&S cost implications of a new weapon system during its acquisition phase. This conviction stems from the belief that a major weapon system procurement decision on a new aircraft, for example, will ultimately lead DoD to incur O&S costs that will exceed the cost of that aircraft's production. Therefore, a decision to buy a new weapon system dictates that its potential O&S costs be subjected to the same thorough analyses and review as are its projected production costs in order to assess the cost effects on DoD.

A large part of the O&S costs incurred by a weapon system is that of recoverable spares.* The CAIG desires that the DSARC be provided with a means for obtaining credible projections of spares costs for new aircraft systems in terms of experience on analogous systems.

The Rand Corporation has undertaken to update and extend a method Rand developed in 1976 for estimating USAF aircraft recoverable spares investment. This work describes the methodology and data used in its development for estimating USAF aircraft spares investment at the major subsystem level--that is, airframe, avionics (including armament) and propulsion, as related to the air vehicle and not the installed engines. The investment estimated is in peacetime operating stock identified as supporting a specific mission/design/series (MDS) aircraft. War readiness materiel (WRM), spare engines, and engine spare parts are not covered. For those aircraft with no WRM authorization, the investment

* A recoverable spare is a durable spare part that normally can be economically restored to serviceability through regular repair procedures.

estimates account for approximately 95 percent of all recoverable spares investment identifiable to a specific MDS.

It would have been desirable to develop a methodology that closely matched the functional processes used by item managers in determining recoverable spares inventories, but this was not feasible because such spares are managed individually and not by weapon system. Also, the methodology is intended for use long before spares can be identified thereby necessitating the use of proxies for functional processes. It would also have been desirable to relate spares investment explicitly to such policy concerns as operational readiness, basing, and not operationally ready spares (NORS) rates, but the available force-wide data would not support such relationships.

II. A STATISTICAL APPROACH TO ESTIMATING INVESTMENTS IN RECOVERABLE USAF AIRCRAFT SPARES

The main purpose of Rand's study of USAF recoverable aircraft spares requirements and attendant investment (and costs) was to develop a methodology for estimating the expected dollar investment of recoverables by major subsystem--namely airframe, avionics (including armament) and propulsion--that is applicable during the pre-production or deployment decision stages of aircraft development. A statistical approach was to build on actual USAF experience in providing spares for aircraft. Ideally, the methodology would include variables representing aircraft cost, performance, physical, and activity characteristics and logistic support structure and provisioning policy that affect spares requirements. The inclusion of both sets of characteristics would, in concept, increase estimating precision and make the methodology more applicable to differing future logistics conditions. In reality, only the aircraft related characteristics could be shown to have a significant statistical relationship to spares inventories synthesized in this study. Policy and logistics support characteristics are imbedded within the variables (and supporting data) and could not be effectively addressed as predictive variables. Thus the estimating methodology discussed below implicitly assumes that spares for future aircraft will be procured, managed, and applied the same way as in the recent past.

USAF RECOVERABLE SPARES DATA BASE

Because USAF aircraft recoverable spares are not managed on a weapon system basis, there is no formal "inventory" per se of spares by aircraft MDS. It is necessary to synthesize such inventories for selected aircraft to update and extend the original Rand developed multiple regression methodology for estimating the investment cost of USAF aircraft recoverables. The key data source for creating these inventories is *The Recoverable Consumption Item Requirements System* (DO41) (AFLCM 57-3). The DO41 contains information on all recoverable items in the USAF inventory, including the weapon system applications of these items. The

specific D041 information required is contained in computerized form in what is called the *Depot Data Bank*. It is operated and maintained by Air Force Logistics Command (AFLC) using the *CREATE* System. Depot Data Bank Records are kept for each recoverable item managed by AFLC. The D041 data elements contained in the *CREATE* Depot Data Bank Records and used in this study are as follows:

- o Record Type "01"--Descriptive Data.
 - ..Master Stock Number (MSN)--The identifying number assigned to each recoverable item.
 - ..Unit Price (in then-year dollars)--the price of an item established by the item manager's estimate, or the standard catalog price, or computation by the J005B system (Standard Price Review Subsystem).
 - ..Program Begin Data--the earliest data of the item's recorded use.
 - ..Program Selection Code--identifies the materiel program under which the item is managed.
 - ..Organization Field Maintenance (OFM) Total Demand Rate--the total demand for the item expressed in terms appropriate to its materiel program; for example, an item belonging to the Flying Hours Materiel Program has its demands expressed in terms of so many demands per flying hour.
- o Record Type "05"--Base Condemnations.
 - ..Master Stock Number.
 - ..1st Month (old).
 - ..2nd through 23rd Month.)
 - ..24th Month (newest month).)

MSN condemnations occurring at base level, recorded by month for the previous (to the date of the D041) 24 months.
- o Record Type "08"--Total Depot Condemnations
 - ..Master Stock Number.
 - ..1st Month (old).
 - ..2nd through 23rd Month.)
 - ..24th Month (newest month).)

MSN condemnations occurring at the depot, etc.

- o Record Type "10"--Total Overhaul Condemnations.
 - ..Master Stock Number.
 - ..1st Month (old).
 - ..2nd through 23rd Month. }
 - ..24th Month (newest month). } MSN condemnations occurring during overhaul, etc.
- o Record Type "29"*--Asset Data.
 - ..Master Stock Number.
 - ..Total POS Assets[†]
- o Record Type "50"--Application Data.
 - ..Master Stock Number.
 - ..Application(s)--the MDS or other stock numbers on which the item appears.
 - ..Quantity per Application--the number of times the item appears on each application listed.

The foregoing data elements as of 30 June 1975, 1976, 1977, and 1978 constitute the D041 portion of the study's longitudinal data base.

The investment represented by the synthesized MDS inventories is determined by multiplying each of the items by their unit prices. To be consistent and to permit comparisons, the investment dollars so determined must be specified in terms of the same year's (constant-year) dollars. The unit price shown for each master stock numbered item in the CREATE Depot Data Bank "01" Record Type is in terms of unspecified then-year dollars. These then-year unit prices must be adjusted to constant-year dollars. Investment has been specified in terms of constant 1978 dollars for this study. An important data source for converting item then-year unit prices to constant 1978 dollars is the *Acquisition and Due-In System* (J041) (AFLCM 171-123, AFLCM 70-1). The

* Redesignated Record Type "42" for June 1978.

[†] Only those assets (POS) used to support peacetime flying programs were used in the analysis. War readiness materiel (WRM) was not included because of essential differences from POS in requirements determination and purpose. WRM is materiel required in *addition* to POS, to support planned wartime activities reflected in the USAF War and Mobilization Plan (WMP). WRM spares requirements stem from the necessity to support the most demanding wartime tasking for each theater of activity.

specific J041 information required for the conversion is contained in computerized form in what is called the *Procurement History File* and is:

- o Master Stock Number.
- o Contract Date.
- o Amount of Contract (\$).
- o Quantity Procured.

The remaining key data requirements involve the flying hours, sorties, landings, and average possessed aircraft by fiscal year and aircraft MDS. These are all candidate explanatory variables in the multiple regressions used in developing the estimating models. The source for these data is the *Aerospace Vehicle Inventory Status and Utilization and Reporting System (AVISURS)* (AFR 65-110). The required data elements are:

- o Aircraft MDS.
- o Calendar Year and Month.
- o Flying Hours.
- o Sorties.
- o Landings.
- o Average Number of Possessed Aircraft.

The other data requirements have been satisfied by hard copy sources. The following is a list of these sources.

- o TO 0025-30, Technical Manual, *Unit Costs of Aircraft, Guided Missiles, and Engines*.
- o USAF Statistical Digests.
- o PA, *USAF Program, Aerospace Vehicles and Flying Hours*.

SAMPLE DETERMINATION

Two sets of sample aircraft were selected for this analysis, one to use as a basis for the multiple regression models of airframe,

avionics, and propulsion spares POS investment as well as the true replenishment models and the second for modeling spares investment during inventory buildup. However, the analysis of this second set of sample aircraft did not result in a recommended estimating relationship. Sixteen aircraft MDS made up the set of sample aircraft used in the multiple regression analysis. They were selected on the basis of a number of considerations including system maturity in the sense that force levels are more or less constant. In other words, aircraft production and deployment were essentially complete. Also important in the selection process was the requirement that the aircraft represent a range of weapon types and missions involving technology covering a time span from the 1950s to the present. Two trainers were also included. The 16 aircraft are:

A-7D	C-5A	RF-4C	F-111D
B-52D	KC-135A	F-4D	F-111F
B-52G	C-141A	F-4E	T-37B
B-52H	F-4C	F-111A	T-38A

Five MDSs constitute the second set of sample aircraft. They represent the new MDS entering the active inventory in significant numbers. They are:

A-10A	TF-15A or F-15B	F-16B
F-15A	F-16A	

DATA SELECTION AND INVENTORY SYNTHESIS

Each recoverable item is identified by an assigned national stock number (NSN).^{*} The requirements for each item emanate from the OFM materiel program to which the item is assigned. The four materiel program possibilities for the recoverables treated in this study and the basis for their requirements determinations are as follows:

^{*} An NSN used as an identifying number in a D041 record is called an MSN.

- o Flying Hours Program--item demand is expressed in terms of flying hours.
- o Squadron Months Program--item demand is a function of squadron months.
- o Equipment (inventory) Program--item demand is based on the number of inventory aircraft; so many assets per aircraft.
- o No OFM Program--item demand is a function of the individual application's (aircraft MDS or other item) peculiarities and is handled on an ad hoc basis.

Any spares or asset inventory synthesized for the sample aircraft subsystems could be expected to have items from most or all of the above four materiel program possibilities to be complete. Appendix A shows spares investment broken down for each of the materiel programs for the total sample of 21 aircraft MDS and their major subsystems. For the 16 aircraft used in the multiple regression analysis, over 95 percent of the spares investment in POS and WRM is directly related to the flying hours materiel program over the four years surveyed. These POS and WRM spares are classified as either peculiar or common. Peculiar items are those with application to only one MDS. Common items are those with application to more than one MDS. In the case of common items for each of the four years of D041 data, the assets were allocated to a specific MDS as a function of the actual flying hour program for the MDS, the total quantity per application, the past year's application percent (the fraction of the MDS force on which the item appeared), and the average number of aircraft that flew the program. There is sufficient uncertainty relative to the synthesized inventories of common WRM items to preclude the investment in such inventories from being used to develop meaningful estimating relationships because of differences from POS in requirements determination and purpose. Also, the D041 "50" record does not identify which of the aircraft shown as applications of a common item are authorized WRM; and besides being classified, such authorizations are dependent on theater of activity rather than force-wide as are the data used in the analysis.

Spares investments in the non-flying hours materiel programs average less than 5 percent, most of which is in assets governed by "No OFM

Program"--assets the demands for which are a function of their applications' peculiarities. Therefore, only spares investment governed by the flying hours materiel program was considered in the regressions.

The data used in the multiple regression analysis to generate the spares investment estimating models is contained in Appendix B.

All stock-numbered items with application to an aircraft MDS in the sample were assigned to one of the three major subsystems: air-frame, avionics, or propulsion. This was done with the aid of the Defense Supply Agency's Cataloging Handbook H2-1, *Federal Supply Classification, Part 1, Groups and Classes*, January 1977.

The spares position of each MSN and its unit price (in unspecified then-year dollars) was obtained from the D041 records for 30 June 1975, 1976, 1977, and 1978. The individual unit prices were adjusted to 1978 dollars with J041 contractual information when such adjustments could not be made using D041 data alone.

In many cases, determination of the D041 unit prices in specified then-year dollars was made by inspection. For example, if an MSN was recorded in two successive years with a price change, the year of the change was assumed to specify the year's dollars. By extension this logic was applied to all of the D041 unit price data. For those unit prices left unspecified after the above described procedure, the J041 Procurement History File was used to arrive at a specification. The procedure involved the most recent contractual information, such as dollar value, quantity of items (NSNs) procured, and *date of contract*, to arrive at the most recent item price in terms of a specified year--the year of the contract. In those few cases where the unit price was still unspecified after the procedures just described were followed, the unit price taken from the "01" record was assumed to be in terms of the then-year dollars corresponding to the last year of procurement* for the aircraft on which the item is installed.

The specified unit price was adjusted to 1978 dollars using the appropriate inflators derived from AFR 173-10, Letter Change 6, dated 6 October 1978, Table 48, *USAF Weighted Inflation Indexes, Base Year*

* For aircraft still in production, the first year of procurement is used.

1979 as of 30 June 1978. Total spares investment in POS for each of the sample aircraft was determined by multiplying POS assets by the adjusted unit price. Appendix A shows total aircraft recoverable spares investment in terms of 1978 dollars, for 1975, 1976, 1977, and 1978 by aircraft MDS, major subsystem, and materiel program for each of 21 USAF aircraft.

As stated previously, the spares investment in POS used in the multiple regression analysis pertains to the flying hours materiel program. This POS investment is in both peculiar and common spares. Appendix B details this investment for the sample of 16 aircraft.

The spares investment positions of these 16 sample aircraft were viewed as steady state positions because recoverables are "life of type" items and the sample was selected for its stability in terms of force posture levels. The spares positions of the 16 sample aircraft viewed statistically at four different times (30 June 1975, 1976, 1977, and 1978) confirmed this steady state hypothesis. There are obvious exclusions from MDS spares investment as synthesized from the D041 data, such as investment in spares made obsolete by past modifications and purged from the D041 system. Likewise investment in spares necessitated by unknown future modifications is not represented. Spares are categorized as being "initial" or "replenishment" depending on how they are funded. This distinction is not present in the data and consequently is not captured in the estimating methodology.

III. REGRESSION MODELS

Tables 1-3 present Rand's models of POS demand-based spares investment in airframe, avionics (including armament), and propulsion. We developed these models by regressing subsystem POS investment on candidate explanatory variables from sets of data relating to aircraft/subsystem characteristics, activity, deployment/support/supply, and cost. The subsystem-dependent variables and the candidate independent, explanatory, or predictor variables for each of the 16 sample aircraft MDS used in developing the models are shown in Appendix B.

For each of the major subsystems, we tested various hypotheses using multiple regression analysis involving different combinations of the independent variables. This led to more than one statistically acceptable hypothesis per major subsystem and a causal ordering among the variables.

A logarithmic form was chosen for the regression models. The equation is:

$$\log Y_{it} = \log \alpha + \sum_j \beta_j \log X_{ijt} + \epsilon_{it}$$

where Y_{it} = investment in POS spares inventory of aircraft subsystem i at time t .
 X_{ijt} = the j th characteristic observed on aircraft subsystem i at time t .
 α and β_j = regression coefficients
 ϵ_{it} = the error for aircraft subsystem i at time t . The errors are assumed to be independent across subsystems but correlated over time with subsystem. The correlation between any two times is ρ .

This form was chosen because:

1. It is statistically more suitable than either the linear or exponential forms. It stabilizes the variance over the range of independent variables in the sense that the error distributions

Table 1

AIRFRAME SPARES PEACETIME OPERATING STOCK^a

Multiple Regression Equation

$$\text{AFSPOSI} = 4.90688(\text{AC})^{.64704}(\text{AFFAC})^{.77881}(\text{PFH})^{.47603}\left(\frac{\text{OFMTDR}}{\text{AF}}\right)^{.61962}$$

Sensitivity Equation

$$\frac{d(\text{AFSPOSI})}{\text{AFSPOSI}} = \left[.64704f_{\text{AC}} + .77881f_{\text{AFFAC}} + .47603f_{\text{PFH}} + .6192f_{\frac{\text{OFMTDR}}{\text{AF}}} \right] (100)$$

where AFSPOSI = Total investment (1978\$) in the peacetime operating stock of airframe recoverable spares.^a

AC = Total active aircraft inventory of the given MDS.

AFFAC = Airframe flyaway cost (1978\$).

PFH^b = Peak flying hours per aircraft per year.

$\frac{\text{OFMTDR}}{\text{AF}}$ = Mean organization field maintenance total demand rate (per 100 flying hours) for airframe subsystem.

$\frac{d(\text{AFSPOSI})}{\text{AFSPOSI}}$ = Percentage change in total investment in the peacetime operating stock of airframe recoverable spares.

f = Percent change in the variables designated by the subscript.

Statistics of the Multiple Regression Analysis

Estimated standard deviation = .24347

R² = .8706

F-statistic^c = 32.374

<u>Variable</u>	<u>t-statistic^c</u>
AC	5.4476
AFFAC	9.4331
PFH	3.5345
$\frac{\text{OFMTDR}}{\text{AF}}$	3.1830

^aSpares covered by the flying hour materiel program.

^bA better statistical fit was obtained using peak flying hours (as opposed to programmed flying hours) because large investments had been made in airframe spares during the Vietnamese war and those assets are still in the inventory. Another reason for favoring peak flying hours is that growing fuel prices since 1974 have caused significant reductions in flying hour programs below the level that the spares may have been intended to support.

^cRegression computer programs compute the ordinary regression parameter estimates (α and β) that are unbiased when observations are correlated. The same is not done for the F and t-statistics. In this study the observations for an aircraft subsystem are correlated over the years of the sample, so all F and t-statistics have been adjusted outside the computer program used to generate the multiple regressions.

Table 2

AVIONICS SPARES PEACETIME OPERATING STOCK^a

Multiple Regression Equation

$$AVSPOSI = 303.06637(AC)^{.81647}(AVFAC)^{.50614} e^{2.1536(I_B) + 1.5512(I_R)} \\ e^{.57039(I_{F/A}) + .88633(I_C) + .92748(I_T)}$$

Sensitivity Equation

$$\frac{d(AVSPOSI)}{AVSPOSI} = \left[.81647f_{AC} + .50614f_{AVFAC} \right] (100)$$

where AVSPOSI = Total investment (1978\$) in the peacetime operating stock of avionics recoverable spares.^a

AC = Total active aircraft inventory of the given MDS.

AVFAC = Avionics flyaway cost (1978\$).

I = Dummy variable indicating aircraft mission type where

I_B = 1 if bomber; = 0 otherwise

I_R = 1 if reconnaissance; = 0 otherwise

$I_{F/A}$ = 1 if fighter or attack; = 0 otherwise

I_C = 1 if cargo; = 0 otherwise

I_T = 1 if tanker, = 0 otherwise

$\frac{d(AVSPOSI)}{AVSPOSI}$ = Percentage change in total investment in the peacetime operating stock of avionics recoverable spares.

f = Percent change in the variables designated by the subscript.

Statistics of the Multiple Regression Analysis

Estimated standard deviation. = .42297

R^2 = .8094

F-statistic = 11.665

<u>Variable</u>	<u>t-statistic</u>
AC	2.7530
AVFAC	2.6212
F/A	1.0492
B	4.0453
C	1.4002
T	1.6285
R	2.6702

^aSpares covered by the flying hour materiel program.

Table 3

PROPULSION SPARES PEACETIME OPERATING STOCK^a

Multiple Regression Equation

$$\text{PSPOSI} = .65283(\text{PFAC}) \cdot 69488_{\text{E}} \cdot 84897$$

Sensitivity Equation

$$\frac{d(\text{PSPOSI})}{\text{PSPOSI}} = \left[.69488f_{\text{PFAC}} + .84897f_{\text{E}} \right] (100)$$

where PSPOSI = Total investment (1978\$) in the peacetime operating stock of propulsion recoverable spares.^a

PFAC = Propulsion flyaway cost (1978\$).

E = Total number of installed engines in the MDS force, that is, the number of MDS aircraft multiplied by the engines per aircraft.

$\frac{d(\text{PSPOSI})}{\text{PSPOSI}}$ = Percentage change in total investment in the peacetime operating stock of propulsion recoverable spares.^a

i = Percent change in the variables designated by the subscript.

Statistics of the Multiple Regression Analysis

Estimated standard deviation = .67318

R^2 = .5841

F-statistic = 11.887

<u>Variable</u>	<u>t-statistic</u>
PFAC	4.3226
E	3.8336

^aSpares governed by the flying hours program.

are in terms of constant percentage values regardless of the absolute differences among the values of the independent variables. Thus the same percentage dollar error is expected for all aircraft types rather than the same absolute dollar error as is the case in exponential or linear models. Very expensive aircraft subsystems are prevented from dominating the results solely because they are expensive.

2. The logarithmic form is more representative of the "real world" situation than the linear form in that it permits many of the candidate explanatory variables to enter the regression multiplicatively.

We performed the multiple regressions using STATLIB, a statistical computing library developed at Bell Laboratories and at Rand. This package has unique data manipulation facilities, superior handling of residuals, and specialized software for handling problems with grouped structure.*

Generally speaking, for aircraft with characteristics typical of those in the sample, one might expect the error of the estimate to range in percentage terms as shown below.

Major Subsystem	Percentage Range ^a
Airframe	+34, -25
Avionics	+75, -43
Propulsion	+114, -53

^aThese numbers represent the effect of \pm one standard deviation.

In addition to the multiple regression equations and the statistics relating to them, Tables 1 through 3 present the sensitivity formulas for each of the estimating equations. For each of the subsystems the

*With four years of data for each of the 16 MDS, 64 data points are available for analysis. However, the four years are highly correlated, so the effective sample size is much less than 64.

sensitivity equation yields the approximate percentage change in spares investment as a function of variations or change in each of the explanatory variables. The sensitivity equations are simplified approximations because they are derived from differential equations applied to discrete changes in the inputs rather than difference equations. Simplified versions of the sensitivity models are also shown in Tables 1 through 3.

AIRFRAME SPARES INVESTMENT

Table 1 shows total investment in the POS of airframe recoverable spares to be a logarithmic function of the number of aircraft, the airframe flyaway cost, the peak flying hour program, and the weighted mean organization field maintenance total demand rate for items whose demands are on a flying hour basis. The definition of each of these variables follows:

AC	The total active aircraft inventory of the given MDS.
AFFAC	The airframe flyaway cost is the average unit flyaway cost exclusive of research and development. This cost reflects 3010 appropriation funds for aircraft adjusted to 1978 dollars.
PFH	The peak flying hour program is the greatest total number of flying hours for the MDS recorded during any one fiscal year. A better statistical fit was obtained using peak flying hours rather than programmed flying hours because many of the aircraft flew higher rates during the Southeast Asian War and by 30 June 1978 still had significant inventories of stock, which had been bought to support wartime operations. Future investments in support of new MDS will be similarly affected by such conditions; and peak inventories accrued for airframes tend to remain in stock because they are less apt to become obsolete than other major subsystems such as avionics.

OFMTDR_{AF}

The mean organization field maintenance total demand rate per 100 flying hours is a measure of airframe reliability. It is the mean, weighted by the total item count, of the OFMTDRs of all the recoverable airframe items. When combined with the PFH it provides a measure of expected demands on the supply system. Contractors' inherent (design) mean time between failures (MTBF) estimates are easily converted into OFMTDRs_{AF} as a function of flying hours. This conversion process is described in *Logistics Performance Factors in Integrated Logistics Support*, AFLCP 800-3, 19 April 1973, Headquarters, Air Force Logistics Command.

AVIONICS SPARES INVESTMENT

Avionics and armament subsystem spares were combined under the avionics heading. This combination reflects the current trend, with the advance in technology, to merge functions that were discrete in older aircraft. The avionics estimating equation for POS is presented in Table 2. Investment was found to be a function of the number of aircraft, their mission, and the avionics flyaway cost. The definitions of the variables not previously given are as follows:

AVFAC The avionics flyaway cost is the average unit flyaway cost of both avionics and armament subsystems exclusive of research and development. This cost reflects 3010 appropriation funds for aircraft adjusted to 1978 dollars.

I_i A dummy variable through which the mission (i) of the MDS is brought into the estimating relationship. For each estimate a value of one is assigned to the dummy variable corresponding to the mission of the MDS. All other dummy variables are assigned a value of zero. The missions specified by the subscript i are B, bomber; R, reconnaissance; F/A, fighter/attack; C, cargo; T, tanker. In the case of a trainer all dummy variables are equal to zero.

Avionics estimates should be used with special caution. Two variables, one representing current costs of recoverable avionics and armament items on board the MDS and one representing year of first production, were significant but have been excluded. These variables reflect two conflicting but statistically inseparable trends. On the one hand, avionics is becoming cheaper and more reliable. On the other, aircraft seem to build up expensive inventories as they age and parts change. For example, T-38s adapted for B-52 training in 1977 now maintain substantial inventories of telemetry gear.

PROPULSION SPARES INVESTMENT

In developing a satisfactory estimating relationship for propulsion spares investment we encountered a problem involving the synthesis of propulsion subsystem inventories. As explained in Section II, an item with application to an aircraft MDS was assigned to one of three major subsystems on the basis of its Federal Supply Classification (FSC) class. Items in FSC classes 2800 and 2900 pertain to engines, turbines, components, and engine accessories. By the convention of this study, such items are assigned to the propulsion subsystem. Technically, if only those items' assets are used to synthesize the POS inventories of propulsion subsystem spares, such inventories would be grossly understated by the amount of those items' assets appearing in the D041 "50" record showing application to an engine type/model/series (TMS). Therefore two sets of POS inventories were synthesized, one using items in FSC classes 2800 and 2900 with the sample aircraft MDS applications and the other using items with applications to those TMS used on the sample MDS. The investment represented in the TMS related inventories is far greater than that in the propulsion POS inventories related to the MDS. Unfortunately, no statistically significant estimating relationships were developed using the TMS related inventories. For information purposes the data used in the TMS analysis is presented in Table 4. As an illustration of the propulsion related POS investment captured by each of the two synthesized inventories, Table 4 shows \$110,050,900 (1978\$-rounded) for the TF39-GE-1/-1A/-1C in 1978. For the same year, Appendix B shows \$1,133,563 (1978\$) for the C-5A, the

Table 4
ENGINE TMS DATA

Engine Type/Model/Series (MDS)	Unit Cost (1978 \$-rounded)	Year	Installed Engines	Engine POS Investment (1978 \$-rounded)	Fleet Engine Hours	OFMTDR Eng (Per 100 flying hours)
TF41-A-1/-1A (A-7D)	\$ 607,800	1975	293	\$ 2,897,600	100,745	.0095
		1976	400	6,779,200	95,270	.0080
		1977	371	8,633,900	114,999	.0048
		1978	357	11,568,600	99,614	.0123
J57-P-19W	629,700	1975	989	27,527,100	287,684	.0047
J57-P-29WA (B-52D)	493,600	1976	1033	33,898,200	233,118	.0039
		1977	1034	31,766,200	274,411	.0038
		1978	850	25,007,500	273,863	.0047
J57-P-43W/-WA/-WB (B-52G)	525,700	1975	1657	25,374,100	710,730	.0178
		1976	1550	23,384,000	654,179	.0196
		1977	1586	23,822,900	572,433	.0182
		1978	1510	23,406,800	541,536	.0210
TF33-P-3 (B-52H)	419,900	1975	732	4,125,300	347,403	.0067
		1976	738	4,628,700	294,315	.0060
		1977	738	4,559,200	296,641	.0045
		1978	743	4,229,000	293,400	.0044
TF39-GE-1/-1A/-1C (C-5A)	1,864,900	1975	275	83,751,800	168,362	.0008
		1976	281	75,477,400	161,807	.0015
		1977	278	87,445,000	193,857	.0017
		1978	281	110,050,900	193,282	.0013
J57-P-59W (KC-135A)	292,600	1975	2600	31,139,700	915,946	.0175
		1976	2636	30,453,300	836,393	.0172
		1977	2605	29,802,100	852,574	.0187
		1978	2622	30,240,500	887,142	.0210
TF33-P-7/-7A (C-141A)	522,100	1975	1094	15,858,000	1,177,606	.0042
		1976	1101	18,780,600	1,188,079	.0054
		1977	1091	18,389,400	1,143,912	.0040
		1978	1088	19,352,400	1,156,284	.0035
J79-GE-15/-15A (F-4C/D; RF-4C)	310,600	1975	2088	28,818,200	573,846	.0030
		1976	2144	27,003,700	538,794	.0022
		1977	2106	23,668,900	518,211	.0018
		1978	2013	18,522,100	495,550	.0034
J79-GE-17/-17A (F-4E)	294,700	1975	1113	6,825,100	306,686	.0024
		1976	1364	4,591,300	307,937	.0033
		1977	1371	4,931,200	346,019	.0029
		1978	1339	5,277,300	321,572	.0042
TF30-P-3 (F-111A)	1,486,400	1975	313	23,182,700	87,949	.0039
		1976	292	24,376,400	67,971	.0056
		1977	334	30,614,000	73,354	.0050
		1978	298	34,570,000	69,000	.0041
TF30-P-9 (F-111D)	1,366,800	1975	181	7,066,200	35,181	.0016
		1976	116	8,784,800	32,675	.0039
		1977	143	12,005,700	33,401	.0042
		1978	130	8,851,500	34,397	.0019
TF30-P-100 (F-111F)	1,101,800	1975	172	19,606,800	46,550	.0120
		1976	165	22,251,600	45,418	.0024
		1977	188	34,729,900	40,774	.0006
		1978	169	38,253,000	39,910	.0051
J69-T-25/-25A (T-37B)	93,600	1975	1465	15,579,700	696,389	.1211
		1976	1394	14,663,700	570,197	.1157
		1977	1322	14,760,900	554,380	.1060
		1978	1401	7,597,100	510,743	.0836
J85-GE-5H (T-38A)	162,200	1975	1892	3,379,500	815,184	.0668
		1976	1807	7,263,700	673,358	.0753
		1977	1785	1,947,900	697,404	.0717
		1978	1750	2,457,800	630,938	.0632

only aircraft MDS on which the TMS is installed, a difference of almost a factor of 100. All differences are not so extreme, however. The TF33-P-7/-7A, which is on the C-141A, shows \$19,352,400 (1978\$-rounded) in Table 4, whereas for the same year Appendix B indicates propulsion spares POS investment of \$6,559,506 (1978\$), a difference of less than a factor of 3.

The MDS related propulsion POS investment used as the dependent variable in the multiple regression analysis provided the statistically significant estimating relationships described here. Such investment was found to be a function of propulsion flyaway cost and the total number of installed engines in the force. The estimating equation is in Table 3. This equation produces an estimate of only propulsion system recoverable spares POS investment as defined in the previous paragraph and does not include spare engines or engine spare parts.

PFAC Propulsion flyaway cost is the average unit flyaway cost exclusive of research and development. This cost reflects 3010 appropriation funds for aircraft adjusted to 1978 dollars.

E The total number of installed engines in the MDS force. It is obtained by multiplying AC by the number of engines per aircraft.

MODEL USE

The estimating equations were designed for use early in the DSARC process. The input data requirements reflect the kinds of data that are available at least as a design goal as far back as the concept formulation stages of the aircraft's development. The estimates of investment resulting from the use of the multiple regressions are point estimates and, given the sample data, are the best estimates obtainable. Having used the models to generate "best" point estimates the nonstatistician user would, in all likelihood, appreciate some quantitative assessment of how good (or bad) the estimates are. However, the following considerations must be taken into account in any assessment of the accuracies of these point estimates. First, the histories of the sample

aircraft are remarkably varied so that the models do not fit the observed data exactly. Thus, there is some uncertainty about what the models and their parameters should be. A new aircraft's subsystems will probably require extrapolation from the characteristics of the data base. This extrapolation decreases the anticipated accuracies of the estimates. The further the extrapolations, the more uncertainty is incorporated into the estimates. Second, uncertainty will be present in unknown amounts for the new aircraft itself. These considerations are discussed more fully with the C-X illustration in Section VI.

A most useful statistic in providing an assessment of accuracy is the estimated standard deviation or standard error of the natural logarithm of the estimate. However, confidence intervals are easily misinterpreted. A more comfortable assessment of accuracy can be obtained from the estimated standard deviation to generate a probability statement concerning the accuracy of any estimate that uses the Rand models.

Although recoverable spares investment estimates may be made "by hand" using the equations of Tables 1 through 3, generating the estimated standard deviation of these estimates and the accompanying probability statements is too involved to be feasible. Therefore in Appendix D we provide a FORTRAN program that does all of these things.

SPECIAL CONSIDERATIONS IN MODEL USE

The following considerations apply to the estimation of spares for new aircraft. The flyaway costs AFFAC, AVFAC, and PFAC can be generated by other models or obtained from a variety of official sources. The important thing to note is that these costs should be in 1978 dollars. The number of aircraft, AC, is the estimated total active aircraft inventory. In all likelihood the only flying hour program estimate that will be available will be a peak flying hour program (PFH). If it is not feasible to obtain OFMTDRs from the conversion of contractors' design MTBFs, then one should use the OFMTDR of the most analogous aircraft subsystem in the sample data base.

To be consistent with cost-quantity curve theory^{*} as it applies to aircraft, any significant change in the number of aircraft, AC, should be accompanied by a change in the airframe, avionics, and propulsion flyaway costs, AFFAC, AVFAC, and PFAC, respectively. The relationship between percent changes in the number of aircraft and flyaway cost is expressed as:[†]

$$\left\{ \begin{array}{c} f_{\text{AFFAC}} \\ \text{or} \\ f_{\text{AVFAC}} \\ \text{or} \\ f_{\text{PFAC}} \end{array} \right\} = (1 + f_{\text{AC}})^b - 1$$

where f_{AC} = percent change in the number of aircraft

$\left\{ \begin{array}{c} f_{\text{AFFAC}} \\ \text{or} \\ f_{\text{AVFAC}} \\ \text{or} \\ f_{\text{PFAC}} \end{array} \right\}$ = percent change in the flyaway cost designated by the subscripts

b = exponent that measures the slope of the learning curve such that

$$b = \frac{\ln S}{\ln 2}$$

S = the learning curve slope (expressed in percent).

^{*}For a thorough treatment of cost-quantity theory, see Harold Asher, *Cost-Quantity Relationships in the Airframe Industry*, The Rand Corporation, R-291, July 1, 1956.

[†]This relationship is derived from the equation for the log-linear cumulative average curve, where flyaway cost is the cum average cost.

IV. RECOVERABLE SPARES INVESTMENT DURING AIRCRAFT
INVENTORY BUILDUP

When a new aircraft MDS enters the active inventory, it is supported with what are called initial spares. Initial spares procurements are limited to those needed to support the aircraft delivered during the first 12-month period. However, support for a maximum of two years may be authorized when low production quantities result in minimum procurements. According to current DoD policy a recoverable item can be budgeted and procured as an initial spare only until a demand development period is established for it or two years elapse from the beginning of its initial service.

The following aircraft constitute the sample of MDS in varying stages of inventory buildup.

A-10A	F-16A
F-15A	F-16B
TF-15A (F-15B)	

The number in the inventory and spares investment are shown in Table 5 for each of the aircraft as of 30 June 1975, 1976, 1977, and 1978. The small sample size coupled with the data reflecting varying stages of inventory buildup provide insufficient information from which to derive a recommended estimating relationship.

Table 5

RECOVERABLE SPARES INVESTMENT DURING AIRCRAFT
INVENTORY BUILDUP^a

(In millions of 1978 dollars; year ending 30 June)

Aircraft	1975	1976	1977	1978
A-10A				
Number of aircraft	5	16	49	116
Investment	0.016	6.221	12.165	22.899
F-15A				
Number of aircraft	29	79	179	260
Investment	12.765	39.557	148.938	253.453
TF-15A				
Number of aircraft	7	15	29	45
Investment	4.635	12.157	20.166	43.560
F-16A				
Number of aircraft	--	2	3	6
Investment	--	0.015	0.129	0.396
F-16B				
Number of aircraft	--	--	1	2
Investment	--	--	0.008	0.142

^aFor spares governed by the flying hours materiel program.

V. ESTIMATING TRUE^{*} REPLENISHMENT

True replenishment is not an inventory investment but a recurring cost, because of the requirement to replace losses caused by fair wear and tear. Such losses are called condemnations. Appendix C details the condemnation information used in developing the estimating relationships of Tables 6, 7, and 8 for the annual replacement costs of condemned airframe, avionics, and propulsion items, respectively. The definitions of the variables are the same as given in Section III with the exception of one not previously entering the preferred propulsion relationships.

$\overline{\text{OFMTDR}}_p$ The mean, weighted by the total item count, of the organization field maintenance total demand rates of all those recoverable propulsion items governed by the flying hours materiel program.

For aircraft with characteristics typical of those in the sample, the standard error of the estimate might be expected to range in percentage terms as follows: annual replacement cost of airframe item condemnations: +69.9, -41.1; annual replacement cost of avionics item condemnations: +194.5, -66.0; annual replacement cost of propulsion item condemnations: +132.3, -57.7.

Tables 6, 7, and 8 include the simplified sensitivity model. The comments on model usage in Section III also apply here.

^{*}Implicit in the use of the word "true" is the omission of inventory buildup that is a part of what is currently called "Replenishment Spares."

Table 6

REPLENISHMENT OF POS TO OFFSET CONDEMNED AIRFRAME ITEMS

Multiple Regression Equation

$$RCCAFI = .00287(AC)^{.83567} (AFFAC)^{.9045} (PFH)^{.66326} (\overline{OFMTDR}_{AF})^{.53908}$$

Sensitivity Equation

$$\frac{d(RCCAFI)}{RCCAFI} = \left[.83567f_{AC} + .9045f_{AFFAC} + .66326f_{PFH} + .53908f_{\overline{OFMTDR}_{AF}} \right] (100)$$

where RCCAFI = Annual replacement cost of condemned airframe items (1978\$).

AC = Total active aircraft inventory of the given MDS.

AFFAC = Airframe flyaway cost (1978\$).

PFH^a = Peak flying hours per aircraft per year.

\overline{OFMTDR}_{AF} = Mean organization field maintenance total demand rate (per 100 flying hours) for airframe subsystem.

$\frac{d(RCCAFI)}{RCCAFI}$ = Percentage change in annual replacement cost of condemned airframe items.

f = Percent change in the variables designated by the subscript.

Statistics of the Multiple Regression Analysis

Estimated standard deviation = .46154

R² = .7408

F-statistic = 20.949

<u>Variable</u>	<u>t-statistic</u>
AC	4.5797
AFFAC	7.1312
PFH	3.1421
\overline{OFMTDR}_{AF}	1.8026

^a A better statistical fit was obtained using peak flying hours (as opposed to programmed flying hours) because large investments had been made in airframe spares during the Vietnamese war and those assets are still in the inventory.

Table 7

REPLENISHMENT OF POS TO OFFSET CONDEMNED AVIONICS ITEMS

Multiple Regression Equation

$$RCCAVI = 178.44118(AC) \cdot 39843(AVFAC) \cdot 40622 e^{2.7003(I_B) + 2.4257(I_R)} \\ e^{1.0999(I_{F/A}) + 1.1811(I_C) + 1.1002(I_T)}$$

Sensitivity Equation

$$\frac{d(RCCAVI)}{RCCAVI} = \left[.39843f_{AC} + .40622f_{AVFAC} \right] (100)$$

where $RCCAVI$ = Annual replacement cost of condemned avionics items (1978\$).^a

AC = Total active aircraft inventory of the given MDS.

$AVFAC$ = Avionics flyaway cost (1978\$).

I = Dummy variable indicating aircraft mission type where

I_B = 1 if bomber; = 0 otherwise

I_R = 1 if reconnaissance; = 0 otherwise

$I_{F/A}$ = 1 if fighter or attack; = 0 otherwise

I_C = 1 if cargo; = 0 otherwise

I_T = 1 if tanker; = 0 otherwise

$\frac{d(RCCAVI)}{RCCAVI}$ = Percentage change in annual replacement cost of condemned avionics items.

f = Percent change in the variables designated by the subscript.

Statistics of the Multiple Regression Analysis

Estimated standard deviation = .87265

R^2 = .6216

F-statistic = 6.548

<u>Variable</u>	<u>t-statistic</u>
AC	0.7844
AVFAC	1.2284
F/A	1.1813
B	2.9617
C	1.0895
T	1.1280
R	2.4381

^aSpares covered by the flying hour materiel program.

Table 8

REPLENISHMENT OF POS TO OFFSET CONDEMNED PROPULSION ITEMS

Multiple Regression Equation

$$RCCPI = .22194(PFAC)^{.77784} (E)^{1.2243} (\overline{OFMTDR}_P)^{1.5508}$$

Sensitivity Equation

$$\frac{d(RCCPI)}{RCCPI} = \left[.77784f_{PFAC} + 1.2243f_E + 1.5508f_{\overline{OFMTDR}_P} \right] (100)$$

where RCCPI = Annual replacement cost of condemned propulsion items (1978\$).

PFAC = Propulsion flyaway cost (1978\$).

E = Total number of installed engines in the MDS force, that is, the number of MDS aircraft multiplied by the engines per aircraft.

\overline{OFMTDR}_P = Mean organization field maintenance total demand rate (per 100 flying hours) for propulsion subsystem.

$\frac{d(RCCPI)}{RCCPI}$ = Percentage change in annual replacement cost of condemned propulsion items.

f = Percent change in the variables designated by the subscript.

Statistics of the Multiple Regression Analysis

Estimated standard deviation = .77649

R^2 = .6489

F-statistic = 14.759

<u>Variable</u>	<u>t-statistic</u>
PFAC	4.2242
E	5.7466
\overline{OFMTDR}_P	3.1281

VI. C-X CASE

To illustrate the application of the estimating methodology, consider a proposed new cargo aircraft, the C-X. The assumed flyaway costs and other program descriptors needed as inputs for the models are listed in Table 9. Table 10 summarizes the estimates of C-X recoverable spares investment.

Table 9
C-X INPUTS TO THE ESTIMATING MODELS

Variable Name	Assumed Value	Remarks
AC	200	Total active aircraft including command support and training
AFFAC	\$42,000,000	Cumulative average { 80 percent learning curve 90 percent learning curve 90 percent learning curve
AVFAC	\$10,000,000	
PFAC	\$ 8,000,000	
PFH	750	Average annual peak flying hours per aircraft (for all aircraft)
OFMTDR _{AF}	0.0275	Analogous to C-5A
E	800	Four engines per aircraft
OFMTDR _P	0.0150	Analogous to C-5A

Table 10
SUMMARY OF ESTIMATES OF C-X RECOVERABLE SPARES FOR 200 AIRCRAFT

	POS Investment (1978\$)	Annual True Replenishment Cost (1978\$)	Annual True Replenishment Cost As A Percentage Of Investment
Airframe	329,835,000	21,949,000	6.65
Avionics	194,165,000	3,348,000	1.72
Propulsion ^a	11,920,000	276,000	2.32
Total	535,920,000	25,573,000	4.77

^aEngine spares and spare engines not included.

AIRFRAME SPARES

$$AFSPOSI = 4.90688(AC)^{.64704}(AFFAC)^{.77881}(PFH)^{.47603}(\overline{OFMTDR}_{AF})^{.61962}$$

where

$$\begin{aligned} AC &= 200 \\ AFFAC &= \$42,000,000 \text{ (1978\$)} \\ PFH &= 750 \\ \overline{OFMTDR}_{AF} &= 0.0275 \end{aligned}$$

Substituting the data for the C-X into the equation for AFSPOSI results in an expected value estimate of \$329,835,000 (1978\$ rounded). This is the best estimate of POS investment in recoverable airframe spares managed by the Flying Hours Materiel Program. The eventual C-X airframe POS investment may not agree with the expected value estimate of such spares investment. This discrepancy, inherent in any forecasting exercise, can be traced to both modeled and unmodeled errors.

Modeled errors are caused by each aircraft's unique characteristics and its associated sparing policy. For example, two aircraft with the same inputs (AC, PFH, and \overline{OFMTDR}_{AF}) would probably have different airframe spares inventories and therefore different investments in such inventories, even though the model would predict the same investment for both. The unique characteristics of the C-X will lead to either underestimates or overestimates; it is impossible to know which. Also, the unique characteristics of the sample aircraft introduce error into the estimating relationships. The importance of this error depends on the extent to which the aircraft being estimated differs from the sample aircraft.

Although modeled errors are inevitable, the data indicate that they probably lie within a specified limited range. Given the inputs for the C-X and the airframe analysis, the probability that the C-X POS investment in airframe recoverable spares will exceed the upper bound of \$429,401,000 (1978\$ rounded) is less than 16 percent. This

probability assessment is based on the estimated standard deviation (of the logarithm estimate), which is 0.29.*

Unmodeled errors come from various sources. They are called unmodeled because their probable magnitude cannot be computed with the available data. One source of unmodeled error is in the input values themselves. If early projections assume that the $C-X \overline{OFMTDR}_{AF}$ is 0.0275 but it turns out to be 0.04, the spares inventory would eventually reflect the decreased reliability implied by this factor.

Mistakes in model specification are a usual cause of unmodeled errors. No analyst likes to admit such errors, but they are nonetheless prevalent. The variables chosen represent underlying phenomena with varying degrees of realism. These approximations may deteriorate with time (changes in circumstances or policy).[†] To some extent inferior variables may have been chosen because they happened to do well with the sample aircraft. Errors in assumptions regarding the functional form of the estimating equation, the independence of the sample aircraft, or the contribution of their unique characteristics influence the estimates to some extent. The user should be alert lest the aircraft under consideration differ from the sample in a meaningful but unmodeled way. The C-X does not appear to pose this difficulty, but a helicopter would. Care has been taken to minimize such errors by using a priori meaningful variables, but it is impossible to provide guarantees.

Rand's model of POS investment in flying hour demand-based recoverable airframe spares was derived from a multiple regression of such spares investment on the number of aircraft, airframe flyaway cost, average annual peak flying hour program per aircraft, and weighted mean organization field maintenance total demand rate for the airframe. The data on the sample aircraft presented in Appendix B determined the multiple regression in its log-log form.

*This probability statement reflects uncertainties associated with the C-X as well as the estimating equation that yields the upper bound. In this case the uncertainty about the unique characteristics of the C-X is the dominating factor.

[†]The theory of this analysis assumes that the sample aircraft are a random sample from a population that includes the candidate aircraft.

AVIONICS SPARES

$$AVSPOSI = 303.06637(AC)^{.81647}(AVFAC)^{.50614} e^{.88633(I_C)}$$

where AC = 200

AVFAC = \$10,000,000 (1978\$)

I_C = 1 (dummy variable indicating that estimate is for a cargo aircraft).

Solving the equation for AVSPOSI with the C-X data results in an estimate of \$194,165,000 (1978\$ rounded). This is the best estimate of POS investment in flying hour demand-based recoverable avionics spares for the C-X. With uncertainty influencing the avionics estimate the same way it influenced that of the airframe, the probability that the investment will exceed \$311,860,000 (1978\$ rounded) is less than 16 percent. This probability assessment is based on the estimated standard deviation (of the logarithm estimate) of 0.56.

The data on the sample aircraft shown in Appendix B determined the multiple regression in its log-log form.

PROPULSION SPARES

$$PSPOSI = .64283(PFAC)^{.69488}(E)^{.84897}$$

where PFAC = \$8,000,000 (1978\$)

$E = 200 \times 4 = 800$

Solving the above equation for PSPOSI results in an estimate of \$11,920,000 (1978\$ rounded). This is the best estimate* of POS investment in flying hour demand-based recoverable propulsion spares for the

*The limitations of propulsion spares POS investment estimates made with the equations presented in this report were discussed in Section III. In order for the C-X POS estimate to be complete allowance should be made for engine TMS POS investment. The data of Table 1 might be used to make such an estimate by analogy. Assuming the C-X engines to be analogous to the TF39-GE-1/-1A/-1C (C-5A) another \$313,167,000 could be added to the C-X estimate summarized in Table 4.

C-X. The probability that such investment will exceed \$20,338,000 (1978\$ rounded) is less than 16 percent. This probability assessment is based on the estimated standard deviation (of the logarithm estimate) of 0.76.

The data on the sample aircraft shown in Appendix B determined the multiple regression in its log-log form.

SENSITIVITY ANALYSIS

Consistency with learning curve theory is important in a sensitivity analysis where flyaway cost is a factor. As explained previously, changes in the number of aircraft effect changes in flyaway cost as a function of the learning curve slope. These relationships are displayed in Fig. 1.

The sensitivity equation for airframe POS investment is given by:

$$\frac{d(\text{AFSPOSI})}{\text{AFSPOSI}} = \left[.64704f_{AC} + .77881f_{\text{AFFAC}} + .47603f_{\text{PFH}} + .6192f_{\frac{\text{OFMTDR}}{\text{AF}}} \right] (100)$$

where the "f" are equal to the percent change in the variables designated by the subscripts.

The sensitivity of changes in the number of C-X aircraft to airframe POS investment is shown below.

Percentage Change in Number of Aircraft (f_{AC})(100)	Percentage Change in Airframe Flyaway Cost Reflecting Learning (S=80%) (f_{AFFAC})(100)	Resultant Change in Airframe POS Investment $\frac{d(\text{AFSPOSI})^a}{\text{AFSPOSI}}$
+50	-12.236	+22.822
+40	-10.265	+17.887
+30	- 8.099	+13.104
+20	- 5.700	+ 8.502
+10	- 3.021	+ 4.118
-10	+ 3.450	- 3.784
-20	+ 7.447	- 7.141
-30	+12.166	- 9.936
-40	+17.873	-11.962
-50	+24.998	-12.883

$$^a f_{\text{PFH}} = 0 \quad f_{\frac{\text{OFMTDR}}{\text{AF}}} = 0$$

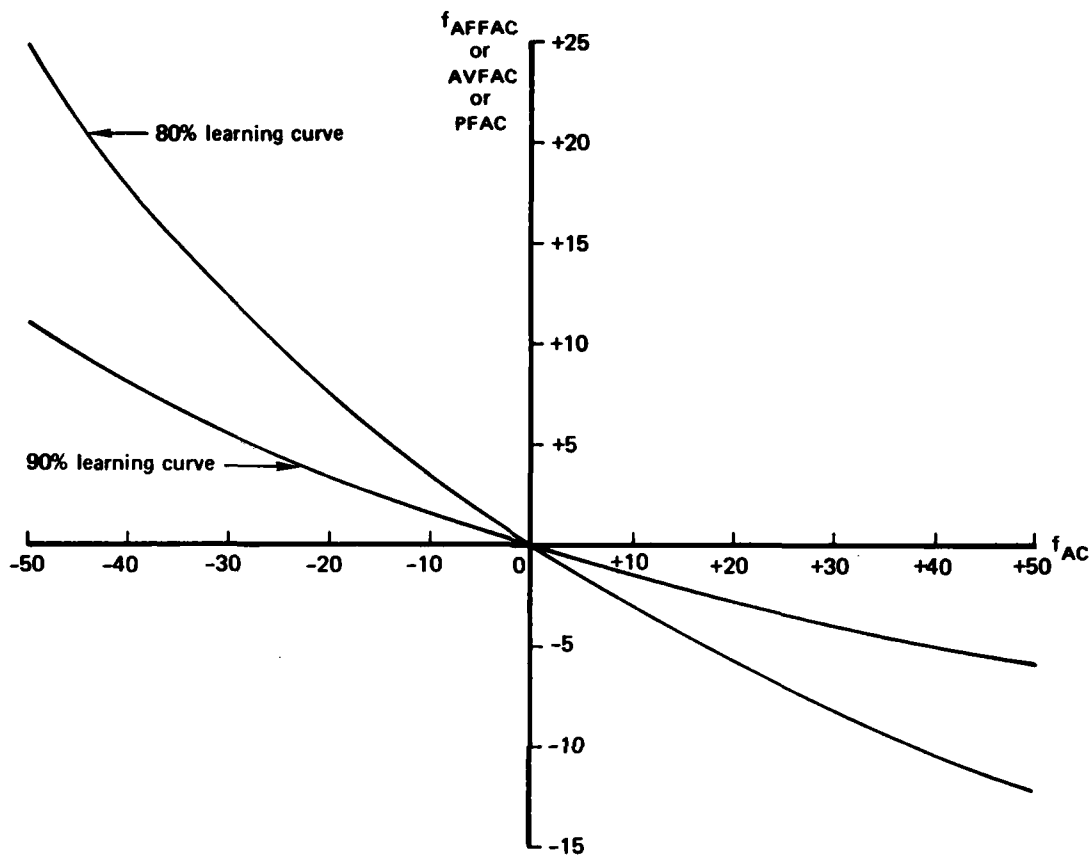


Fig. 1 — Percentage change in flyaway cost versus percentage change in number of aircraft for learning curve slopes of 80 and 90 percent

As can be seen by inspection, a 50 percent increase in the peak flying hour program would result in a 23.8 percent increase in airframe POS investment, AC, AFFAC, and $\overline{\text{OFMTDR}}_{\text{AF}}$ being held constant. However, an improvement in overall airframe reliability of 10 percent, represented in the sensitivity equation by $\overline{\text{OFMTDR}}_{\text{AF}} = 0.1$, decreases airframe POS investment by 6.2 percent, all other variables being held constant.

The sensitivity of avionics POS investment is given by:

$$\frac{d(\text{AVSPOSI})}{\text{AVSPOSI}} = \left[.81647f_{\text{AC}} + .50614f_{\text{AVFAC}} \right] (100)$$

The sensitivity of changes in the number of C-X aircraft to avionics POS investment is as follows:

Percentage Change in Number of Aircraft (f_{AC})(100)	Percentage Change in Avionics Flyaway Cost Reflecting Learning (S=90%) (f_{AVFAC})(100)	Resultant Change in Avionics POS Investment $\frac{d(AVSP\text{OSI})}{AVSP\text{OSI}}$
+50	- 5.977	+37.798
+40	- 4.986	+30.135
+30	- 3.909	+22.516
+20	- 2.733	+13.596
+10	- 1.438	+ 7.437
-10	+ 1.614	- 7.348
-20	+ 3.450	-14.583
-30	+ 5.571	-21.674
-40	+ 8.074	-28.572
-50	+11.111	-35.200

Propulsion POS investment is most sensitive to the total number of installed engines as shown by inspection of the sensitivity equation.

$$\frac{d(PS\text{OSI})}{PS\text{OSI}} = \left[.69438f_{PFAC} + .84897f_E \right](100)$$

The estimates of annual true replenishment for the C-X are shown in Table 10 and were made using the multiple regression equations of Tables 6, 7, and 8.

TIME-PHASING

The estimates of Table 10 on a per aircraft basis were used to produce Table 11, which illustrates how the estimates of POS investment and true replenishment might be used to assess their time-phased effects. An investigation of Air Force funding of aircraft programs as reported in various USAF Force and Financial Program (F&FP) documents produced insufficient visibility between the budgetary categories of initial and replenishment spares to provide a simple algorithm with which to partition POS into those same categories. Furthermore, reconciling the F&FP funding patterns with any suggested by

Table 11
ILLUSTRATION OF HYPOTHETICAL TIME-PHASED POS INVESTMENT IN RECOVERABLE
SPARES AND TRUE REPLENISHMENT USING C-X ESTIMATES^a
(Millions of 1978\$)

Item	1981	1982	1983	1984	1985	1986	1987	1988	1990	1991
Aircraft procured	40	40	40	40	40	0	0	0	0	0
Cumulative aircraft procured	40	80	120	160	200	200	200	200	200	200
Airframe POS investment @ \$1,649 per aircraft	\$ 65.97	\$ 65.97	\$ 65.97	\$ 65.97	\$ 65.97	0	0	0	0	0
Cumulative airframe POS investment	65.97	131.93	197.90	263.87	329.84	329.84	329.84	329.84	329.84	329.84
Annual true replenishment @ \$.110 per aircraft	--	--	1.20	17.60	22.00	22.00	22.00	22.00	22.00	22.00
Avionics POS investment @ \$.971 per aircraft	\$ 38.83	\$ 38.83	\$ 38.83	\$ 38.83	\$ 38.83	0	0	0	0	0
Cumulative avionics POS investment	38.83	77.67	116.50	155.33	194.17	194.17	194.17	194.17	194.17	194.17
Annual true replenishment @ \$.017 per aircraft	--	--	2.04	2.72	3.40	3.40	3.40	3.40	3.40	3.40
Propulsion POS investment @ \$.060 per Aircraft	\$ 2.40	\$ 2.40	\$ 2.40	\$ 2.40	\$ 2.40	0	0	0	0	0
Cumulative propulsion POS investment	2.40	4.80	7.20	9.60	12.00	12.00	12.00	12.00	12.00	12.00
Annual true replenishment @ \$.001	--	--	0.12	0.16	0.20	0.20	0.20	0.20	0.20	0.20
Total POS investment @ \$2,680 per aircraft	\$107.18	\$107.18	\$107.18	\$107.18	\$107.18	0	0	0	0	0
Cumulative total POS investment	107.18	214.36	321.54	428.72	535.90	535.90	535.90	535.90	535.90	535.90
Total annual true replenishment @ \$.128 per aircraft	--	--	15.36	20.48	25.60	25.60	25.60	25.60	25.60	25.60

^a True replenishment is assumed to begin in the third year of the program. Totals might not add because of dollar rounding.

AFLCP 173-3 proved impossible.* The distinction between initial and replenishment is not present in the D041 data and consequently is not captured in the estimating equations in this report. Therefore a user of these equations should keep in mind that the estimates of POS include both initial spares and those replenishment spares used for inventory buildup, some of which are to offset anticipated condemnations.

*The Air Force document that describes a method for estimating aircraft initial and replenishment investment spares is AFLC Pamphlet 173-3, dated 12 March 1974, "A Guide For Estimating Aircraft Logistics Support Costs." The initial spares estimates produced by using this method are based on those aggregates of Air Force Logistics Command cost data that represent a percentage of aircraft recurring flyaway cost. The budgeting for replenishment spares is also based on a percentage factor. For each year of operational active aircraft delivery, the replenishment spares factor is applied to the total of weapon system recurring flyaway cost plus training devices plus peculiar aerospace ground equipment (AGE). The pamphlet cautions that the percentage values used are illustrative only. The current factors to be applied in a specific cost study should be obtained from the Hq. AFLC Directorate of Materiel Requirements (MMR), DCS Materiel Management.

VII. CONCLUSIONS

This study has developed a set of estimating equations with underlying data for planning purposes. The data would not support hypotheses relating spares investment to policy concerns such as operational readiness (OR) and not operationally ready spares (NORS) rates. The Air Force defines the OR rate of a grouping of aircraft as the percentage of aircraft that can perform all assigned missions at a specific time. The NOR rate is the complement of the OR rate, and it can be divided into proportions that are caused by maintenance conditions, not operationally ready maintenance (NORM), and by supply or spares shortages (NORS).

The hypotheses tested were based on the argument that spares investment buys OR.

Such an argument implies the existence of spares inventories by MDS--that is, a weapon system spares policy rather than the current Air Force item management policy, but there are no such inventories or policy. Furthermore, common spares support installed items without specific regard to MDS application, whereas OR is an aircraft (in this case) condition status.

NORS as it affects OR is a condition of spares availability. Investment can provide quantity but not availability, in the sense that the required part will be guaranteed to be available to replace a failure in time for the affected aircraft to perform its next mission (a policy dictate). An aircraft at a particular location can be designated NORS for a given part even when there are sufficient spares in the support system.

In summary, aircraft OR is determined by two transitory condition statuses, NORM and NORS. The NORM condition is not influenced by spares investment. NORS is determined by spares availability rather than quantity except when insufficiency affects availability. Spares insufficiency, as it influences NORS, happens when not enough has been invested in the *right* spares to insure their availability. "How much is enough?" and "what are the right spares?" are questions that cannot

be answered definitively with the knowledge derived from this study. At the other extreme, saturating the support system with spares of all kinds can theoretically eliminate the NORS condition. However, such unlimited spares investment will not improve OR beyond the NORM condition.

In different combinations, sorties, landings, programmed flying hours, and number of squadrons proved to be statistically significant explanations of airframe spares POS investment. However, they were not in the preferred estimating equation, which contained peak flying hours.

The limitations of the estimating equations presented in this report have been adequately covered throughout, but data limitations have been only briefly discussed until now. Even though the data used in this analysis were not ideally suited for its purposes, they were the best available. Such is usually the case when data bases are not specifically designed for present purposes, so the analyst must adjust the data without subverting their true meaning. Even with all the problems inherent in the use of such data and data bases, the results of the study were surprisingly good.

Some specific problems pertaining to the D041 data as used in this study relate to the necessity for determining the arbitrary major subsystem grouping of stock numbers and in what year's dollars item unit prices are recorded. Without a determination of feasibility in terms of time and cost, both problems are solvable. The appropriate year for the unit price could simply be entered in the D041 system. Not so simple would be the cross indexing of stock number and work unit code (WUC). This cross indexing would provide for a more accurate subsystem grouping of stock numbers and allow the synthesizing of spares inventories into such avionics (and armament) subsystems as communications, fire control, and ECM. With such data refinements a more complete and tighter estimating equation would be possible.

Subsystem flyaway cost as used in this analysis also presents difficulties. Clearly, the costs used do not accurately reflect the actual flyaway costs attributed to the MDS in the sample because numerous modifications have been made to the aircraft over time. The costs of these mods are not captured in the flyaway costs (a source of error in the estimating equations), but the investment in mod spares is.

In spite of these obvious shortcomings it would be useful to:

- o Extend the data base to include 1979 and 1980.
- o Try to understand what determines engine spares investment.
- o Continue to track spares investment during the inventory build-up of the A-10, F-15, and F-16 aircraft.

Appendix A

AIRCRAFT RECOVERABLE SPARES INVESTMENT

This appendix lists total aircraft recoverable spares investment in terms of 1978 dollars for 1975, 1976, 1977, and 1978 by aircraft, major subsystem, and materiel program for each of 21 USAF aircraft. The same breakdown is also provided for both peculiar and common spares investment. These are given in Tables A.1 through A.63. Peculiar investment is the investment in spares with application to one aircraft MDS, whereas common investment pertains to the investment in spares with more than one aircraft MDS application.

The requirements for each stock-numbered recoverable item emanate from the organization field maintenance (OFM) materiel program to which the item is assigned. The vast majority of items are directly related to the flying hours materiel program. In this case demand is expressed in terms of flying hours (OFMTDR)--so many demands per one hundred flying hours. Item demand classified as belonging to no OFM program is a function of the individual aircraft MDS's peculiarities and is handled on an ad hoc basis. In some years there were item spares with no materiel program entries in the D041s surveyed for this study. Their investment dollars are recorded in the tables as belonging to an "Unknown" materiel program.

Table A.1
MODEL/DESIGN/SERIES A007D, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
AIRFRAME	68,276,389	62.40	71,801,503	60.14	78,555,855	59.36	83,343,829	54.40
MATERIEL PROGRAM:								
FLYING HOURS	65,903,329	96.52	69,581,306	96.91	76,767,348	97.72	80,130,990	96.15
NO OFM	1,949,874	2.86	1,581,661	2.20	1,305,544	1.66	2,182,751	2.62
EQUIPMENT (INV)	423,186	.62	638,536	.89	482,963	.61	1,016,184	1.22
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	13,904	.02
AVIONICS	36,749,010	33.59	43,074,243	36.08	49,104,054	37.10	65,264,992	42.60
MATERIEL PROGRAM:								
FLYING HOURS	36,596,794	99.59	42,762,175	99.28	48,391,746	98.55	58,180,765	89.15
NO OFM	23,868	.06	25,519	.06	139,534	.28	6,522,730	9.99
EQUIPMENT (INV)	128,348	.35	168,990	.39	572,774	1.17	561,497	.86
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	117,559	.27	0	.0	0	.0
PROPULSION	4,385,826	4.01	4,506,305	3.77	4,688,566	3.54	4,592,452	3.00
MATERIEL PROGRAM:								
FLYING HOURS	4,146,872	94.55	4,106,638	91.13	4,064,979	86.70	4,267,589	92.93
NO OFM	238,954	5.45	399,667	8.87	623,587	13.30	324,863	7.07
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
TOTAL AIRCRAFT	109,411,225	100.00	119,382,051	100.00	132,348,475	100.00	153,201,273	100.00
MATERIEL PROGRAM:								
FLYING HOURS	106,646,995	97.47	116,450,119	97.54	129,224,073	97.64	142,579,344	93.07
NO OFM	2,212,696	2.02	2,006,847	1.68	2,068,665	1.56	9,030,344	5.89
EQUIPMENT (INV)	551,534	.50	807,526	.68	1,055,737	.80	1,577,681	1.03
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	117,559	.10	0	.0	13,904	.01

Table A.2
MODEL/DESIGN/SERIES A007D, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
AIRFRAME	39,979,593	56.48	41,595,744	56.48	46,331,962	56.60	47,728,101	51.99
MATERIEL PROGRAM:								
FLYING HOURS	39,564,617	98.96	41,152,212	98.93	46,033,751	99.36	46,437,363	97.30
NO OFM	332,176	.83	250,619	.60	141,581	.31	492,289	1.03
EQUIPMENT (INV)	82,800	.21	192,913	.46	156,630	.34	784,545	1.64
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	13,904	.03
AVIONICS	26,414,270	37.32	27,550,474	37.41	30,842,218	37.68	39,474,383	43.00
MATERIEL PROGRAM:								
FLYING HOURS	26,398,144	99.94	27,414,917	99.51	30,684,725	99.49	39,332,078	99.64
NO OFM	16,126	.06	17,998	.07	121,120	.39	99,795	.25
EQUIPMENT (INV)	0	.0	0	.0	36,373	.12	42,510	.11
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	117,559	.43	0	.0	0	.0
PROPULSION	4,385,826	6.20	4,506,305	6.12	4,688,566	5.73	4,592,452	5.00
MATERIEL PROGRAM:								
FLYING HOURS	4,146,872	94.55	4,106,638	91.13	4,064,979	86.70	4,267,589	92.93
NO OFM	238,954	5.45	399,667	8.87	623,587	13.30	324,863	7.07
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
TOTAL AIRCRAFT	70,779,689	100.00	73,652,523	100.00	81,862,746	100.00	91,794,936	100.00
MATERIEL PROGRAM:								
FLYING HOURS	70,109,633	99.05	72,673,767	98.67	80,783,455	98.68	90,037,030	98.08
NO OFM	587,256	.83	668,284	.91	886,288	1.08	916,947	1.00
EQUIPMENT (INV)	82,800	.12	192,913	.26	193,003	.24	827,055	.90
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	117,559	.16	0	.0	13,904	.02

Table A.3
 MODEL/DESIGN/SERIES A007D, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
 BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
AIRFRAME	28,296,796	73.25	30,205,759	66.05	32,223,893	63.83	35,615,728	58.00
MATERIEL PROGRAM:								
FLYING HOURS	26,338,712	93.08	28,429,094	94.12	30,733,597	95.38	33,693,627	94.60
NO OFM	1,617,698	5.72	1,331,042	4.41	1,163,963	3.61	1,690,462	4.75
EQUIPMENT (INV)	340,386	1.20	445,623	1.48	326,333	1.01	231,639	.65
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
AVIONICS	10,334,740	26.75	15,523,769	33.95	18,261,836	36.17	25,790,609	42.00
MATERIEL PROGRAM:								
FLYING HOURS	10,198,650	98.68	15,347,258	98.86	17,707,021	96.96	18,848,687	73.08
NO OFM	7,742	.07	7,521	.05	18,414	.10	6,422,935	24.90
EQUIPMENT (INV)	128,348	1.24	168,990	1.09	536,401	2.94	518,987	2.01
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
PROPULSION	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
TOTAL AIRCRAFT	38,631,536	100.00	45,729,528	100.00	50,485,729	100.00	61,406,337	100.00
MATERIEL PROGRAM:								
FLYING HOURS	36,537,362	94.58	43,776,352	95.73	48,440,618	95.95	52,542,314	85.56
NO OFM	1,625,440	4.21	1,338,563	2.93	1,182,377	2.34	8,113,397	13.21
EQUIPMENT (INV)	468,734	1.21	614,613	1.34	862,734	1.71	750,626	1.22
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.4
MODEL/DESIGN/SERIES A010A, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
AIRFRAME	11,341	72.25	5,939,763	95.48	8,511,872	69.97	13,769,206	60.13
MATERIEL PROGRAM:								
FLYING HOURS	11,294	99.59	5,859,623	98.65	2,185,553	25.68	7,014,379	50.94
NO OFM	0	.0	72,806	1.23	6,272,861	73.70	6,540,943	47.50
EQUIPMENT (INV)	47	.41	2,500	.04	53,458	.63	213,878	1.55
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	4,834	.08	0	.0	0	.0
AVIONICS	4,356	27.75	216,468	3.48	3,253,238	26.74	8,250,132	36.03
MATERIEL PROGRAM:								
FLYING HOURS	4,356	100.00	215,977	99.77	3,120,456	95.92	8,133,469	98.59
NO OFM	0	.0	491	.23	132,782	4.08	116,255	1.41
EQUIPMENT (INV)	0	.0	0	.0	0	.0	408	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
PROPULSION	0	.0	64,781	1.04	399,499	3.28	879,356	3.84
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	64,781	100.00	368,826	92.32	783,085	89.05
NO OFM	0	.0	0	.0	30,673	7.68	96,271	10.95
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
TOTAL AIRCRAFT	15,697	100.00	6,221,012	100.00	12,164,609	100.00	22,898,688	100.00
MATERIEL PROGRAM:								
FLYING HOURS	15,650	99.70	6,140,381	98.70	5,674,835	46.65	15,930,933	69.57
NO OFM	0	.0	73,297	1.18	6,436,316	52.91	6,753,469	29.49
EQUIPMENT (INV)	47	.40	2,500	.04	53,458	.44	214,286	.94
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	4,834	.08	0	.0	0	.0

Table A.5
MODEL/DESIGN/SERIES AOIOA, PECULIAR SPARES INVESTMENT (1978\$)
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	189	100.00	5,891,024	98.24	8,246,801	82.82	12,639,761	71.84
MATERIEL PROGRAM:								
FLYING HOURS	189	100.00	5,813,386	98.68	1,947,321	23.61	6,002,907	47.49
NO OFM	0	.0	72,804	1.24	6,258,587	75.89	6,524,651	51.62
EQUIPMENT (INV)	0	.0	0	.0	40,893	.50	112,203	.89
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	4,834	.08	0	.0	0	.0
<u>AVIONICS</u>	0	.0	40,585	.68	1,311,057	13.17	4,075,638	23.16
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	40,585	100.00	1,218,006	92.90	4,038,758	99.10
NO OFM	0	.0	0	.0	93,051	7.10	36,472	.89
EQUIPMENT (INV)	0	.0	0	.0	0	.0	408	.01
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	64,781	1.08	399,499	4.01	879,356	5.00
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	64,781	100.00	368,826	92.32	783,085	89.05
NO OFM	0	.0	0	.0	30,673	7.68	96,271	10.95
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	189	100.00	5,996,390	100.00	9,957,357	100.00	17,594,755	100.00
MATERIEL PROGRAM:								
FLYING HOURS	189	100.00	5,918,752	98.71	3,534,153	35.49	10,824,750	61.52
NO OFM	0	.0	72,804	1.21	6,382,311	64.10	6,657,394	37.84
EQUIPMENT (INV)	0	.0	0	.0	40,893	.41	112,611	.64
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	4,834	.08	0	.0	0	.0

Table A.6
MODEL/DESIGN/SERIES A010A, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	11,152	71.91	48,739	21.70	265,071	12.01	1,129,439	21.29
MATERIEL PROGRAM:								
FLYING HOURS	11,105	99.58	46,237	94.87	238,232	89.87	1,011,472	89.56
NO OFM	0	.0	2	.0	14,274	5.38	16,292	1.44
EQUIPMENT (INV)	47	.42	2,500	5.13	12,565	4.74	101,675	9.00
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	4,356	28.09	175,883	78.30	1,942,181	87.99	4,174,494	78.71
MATERIEL PROGRAM:								
FLYING HOURS	4,356	100.00	175,392	99.72	1,902,450	97.95	4,094,711	98.09
NO OFM	0	.0	491	.28	39,731	2.05	79,783	1.91
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	15,508	100.00	224,622	100.00	2,207,252	100.00	5,303,933	100.00
MATERIEL PROGRAM:								
FLYING HOURS	15,461	99.70	221,629	98.67	2,140,682	96.98	5,106,183	96.27
NO OFM	0	.0	493	.22	54,005	2.43	96,075	1.81
EQUIPMENT (INV)	47	.30	2,500	1.11	12,565	.57	101,675	1.92
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.7
MODEL/DESIGN/SERIES B052D, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
AIRFRAME	139,477,050	42.70	137,370,853	41.02	141,347,449	35.70	140,559,093	37.34
MATERIEL PROGRAM:								
FLYING HOURS	134,563,400	96.48	133,809,355	97.41	136,336,255	96.45	135,395,362	96.33
NO OFM	3,708,781	2.66	2,507,298	1.83	3,774,469	2.67	4,254,555	3.03
EQUIPMENT (INV)	1,204,869	.86	1,054,200	.77	1,183,590	.84	909,176	.65
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	53,135	.04	0	.0
AVIONICS	176,850,573	54.15	186,992,163	55.84	231,359,749	60.07	223,959,278	59.50
MATERIEL PROGRAM:								
FLYING HOURS	174,640,408	98.75	185,366,240	99.13	227,142,616	98.18	217,573,118	97.15
NO OFM	0	.0	101,873	.05	2,421,693	1.05	5,037,874	2.25
EQUIPMENT (INV)	2,210,165	1.25	1,524,050	.82	1,788,137	.77	1,348,286	.60
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	7,303	.0	0	.0
PROPULSION	10,292,400	3.15	10,522,421	3.14	12,454,810	3.23	11,871,333	3.15
MATERIEL PROGRAM:								
FLYING HOURS	9,517,728	92.47	10,038,416	95.40	11,585,121	93.02	11,163,831	94.04
NO OFM	774,672	7.53	484,005	4.60	869,689	6.98	707,502	5.96
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
TOTAL AIRCRAFT	326,620,023	100.00	334,885,437	100.00	385,162,008	100.00	376,389,704	100.00
MATERIEL PROGRAM:								
FLYING HOURS	318,721,536	97.58	329,214,011	98.31	375,063,992	97.38	364,132,311	96.74
NO OFM	4,483,453	1.37	3,093,176	.92	7,065,851	1.83	9,999,931	2.66
EQUIPMENT (INV)	3,415,034	1.05	2,578,250	.77	2,971,727	.77	2,257,462	.60
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	60,438	.02	0	.0

Table A.8
MODEL/DESIGN/SERIES B052D, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	18,848,469	60.41	23,535,576	57.73	23,633,285	42.46	40,884,368	63.48
MATERIEL PROGRAM:								
FLYING HOURS	18,484,056	98.07	23,180,473	98.49	23,219,821	98.25	37,897,607	92.69
NO OFM	13,400	.07	13,400	.06	13,400	.06	2,635,512	6.45
EQUIPMENT (INV)	351,013	1.86	341,703	1.45	346,929	1.47	351,249	.86
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	53,135	.22	0	.0
<u>AVIONICS</u>	12,354,369	39.59	17,230,585	42.26	30,687,722	55.13	22,159,301	34.41
MATERIEL PROGRAM:								
FLYING HOURS	12,196,012	98.72	17,230,585	100.00	30,571,839	99.62	22,043,418	99.48
NO OFM	0	.0	0	.0	115,883	.38	115,883	.52
EQUIPMENT (INV)	158,357	1.28	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	2,587	.01	1,340,561	2.41	1,360,957	2.11
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	2,587	100.00	1,340,561	100.00	1,360,957	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	31,202,838	100.00	40,768,748	100.00	55,661,568	100.00	64,404,626	100.00
MATERIEL PROGRAM:								
FLYING HOURS	30,680,068	98.32	40,413,645	99.13	55,132,221	99.05	61,301,982	95.18
NO OFM	13,400	.04	13,400	.03	129,283	.23	2,751,395	4.27
EQUIPMENT (INV)	509,370	1.63	341,703	.84	346,929	.62	351,249	.55
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	53,135	.10	0	.0

Table A.9
MODEL/DESIGN/SERIES B052D, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	120,628,581	40.83	113,835,277	38.70	117,714,164	35.73	99,674,725	31.95
MATERIEL PROGRAM:								
FLYING HOURS	116,079,344	96.23	110,628,882	97.18	113,116,434	96.09	97,497,755	97.82
NO OFM	3,695,381	3.06	2,493,898	2.19	3,761,069	3.20	1,619,043	1.62
EQUIPMENT (INV)	853,856	.71	712,497	.63	836,661	.71	557,927	.56
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	164,496,204	55.68	169,761,578	57.72	200,672,027	60.90	201,799,977	64.68
MATERIEL PROGRAM:								
FLYING HOURS	162,444,396	98.75	168,135,655	99.04	196,570,777	97.96	195,529,700	96.89
NO OFM	0	.0	101,873	.06	2,305,810	1.15	4,921,991	2.44
EQUIPMENT (INV)	2,051,808	1.25	1,524,050	.90	1,788,137	.89	1,348,286	.67
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	7,303	.0	0	.0
<u>PROPULSION</u>	10,292,400	3.48	10,519,834	3.58	11,114,249	3.37	10,510,376	3.37
MATERIEL PROGRAM:								
FLYING HOURS	9,517,728	92.47	10,035,829	95.40	10,244,560	92.18	9,802,874	93.27
NO OFM	774,672	7.53	484,005	4.60	869,689	7.82	707,502	6.73
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	295,417,185	100.00	294,116,689	100.00	329,500,440	100.00	311,985,078	100.00
MATERIEL PROGRAM:								
FLYING HOURS	288,041,468	97.50	288,800,366	98.19	319,931,771	97.10	302,830,329	97.07
NO OFM	4,470,053	1.51	3,079,776	1.05	6,936,568	2.11	7,248,536	2.32
EQUIPMENT (INV)	2,905,664	.98	2,236,547	.76	2,624,798	.80	1,906,213	.61
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	7,303	.0	0	.0

Table A.10
MODEL/DESIGN/SERIES B052G, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	145,331,051	36.60	150,112,043	35.00	156,492,167	33.34	156,452,151	29.97
MATERIEL PROGRAM:								
FLYING HOURS	140,558,903	96.72	146,392,583	97.52	150,240,272	96.00	151,428,137	96.79
NO OFM	3,154,245	2.17	1,957,752	1.30	2,451,581	1.57	2,653,723	1.70
EQUIPMENT (INV)	1,617,903	1.11	1,761,708	1.17	3,800,314	2.43	2,370,291	1.52
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	239,888,543	60.42	264,546,611	61.69	303,394,979	64.64	356,713,879	68.33
MATERIEL PROGRAM:								
FLYING HOURS	233,564,642	97.36	260,283,301	98.39	298,531,010	98.40	342,026,130	95.88
NO OFM	443,400	.18	1,552,180	.59	1,948,192	.64	12,041,398	3.38
EQUIPMENT (INV)	5,880,501	2.45	2,711,130	1.02	2,889,720	.95	2,646,351	.74
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	26,057	.01	0	.0
<u>PROPULSION</u>	11,807,481	2.97	14,182,127	3.31	9,448,991	2.01	8,858,238	1.70
MATERIEL PROGRAM:								
FLYING HOURS	11,668,080	98.82	14,103,458	99.45	9,374,849	99.22	8,819,107	99.56
NO OFM	139,401	1.18	78,669	.55	74,142	.78	39,131	.44
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	397,027,075	100.00	428,840,781	100.00	469,336,137	100.00	522,024,268	100.00
MATERIEL PROGRAM:								
FLYING HOURS	385,191,625	97.17	420,779,342	98.12	458,146,131	97.62	502,273,374	96.22
NO OFM	3,737,046	.94	3,588,601	.84	4,473,915	.95	14,734,252	2.82
EQUIPMENT (INV)	7,498,404	1.89	4,472,838	1.04	6,690,034	1.43	5,016,642	.96
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	26,057	.01	0	.0

Table A.11
MODEL/DESIGN/SERIES B052G, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
AIRFRAME	39,004,379	63.41	34,127,659	61.15	45,159,973	63.01	48,807,022	63.59
MATERIEL PROGRAM:								
FLYING HOURS	38,111,385	97.71	33,717,601	98.80	43,215,813	95.69	46,805,508	95.90
NO OFM	786,314	2.02	318,166	.93	271,131	.60	275,443	.56
EQUIPMENT (INV)	106,680	.27	91,892	.27	1,673,029	3.70	1,726,071	3.54
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
AVIONICS	17,662,807	28.71	17,113,208	30.66	19,674,094	27.45	21,475,214	27.98
MATERIEL PROGRAM:								
FLYING HOURS	16,682,072	94.45	17,113,208	100.00	19,669,247	99.98	21,475,214	100.00
NO OFM	0	.0	0	.0	4,847	.02	0	.0
EQUIPMENT (INV)	980,735	5.55	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
PROPULSION	4,846,500	7.88	4,567,265	8.18	6,836,227	9.54	6,464,949	8.42
MATERIEL PROGRAM:								
FLYING HOURS	4,846,500	100.00	4,567,265	100.00	6,836,227	100.00	6,464,949	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
TOTAL AIRCRAFT	61,513,686	100.00	55,808,132	100.00	71,670,294	100.00	76,747,185	100.00
MATERIEL PROGRAM:								
FLYING HOURS	59,639,957	96.95	55,398,074	99.27	69,721,287	97.28	74,745,671	97.39
NO OFM	786,314	1.28	318,166	.57	275,978	.39	275,443	.36
EQUIPMENT (INV)	1,087,415	1.77	91,892	.16	1,673,029	2.33	1,726,071	2.25
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.12

MODEL/DESIGN/SERIES B052G, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	106,326,672	31.69	115,984,384	31.09	111,332,194	28.00	107,645,129	24.17
MATERIEL PROGRAM:								
FLYING HOURS	102,447,518	96.35	112,674,982	97.15	107,024,459	96.13	104,622,629	97.19
NO OFM	2,367,931	2.23	1,639,586	1.41	2,180,450	1.96	2,378,280	2.21
EQUIPMENT (INV)	1,511,223	1.42	1,669,816	1.44	2,127,285	1.91	644,220	.60
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	222,225,736	66.23	247,433,403	66.33	283,720,885	71.35	335,238,665	75.29
MATERIEL PROGRAM:								
FLYING HOURS	216,882,570	97.60	243,170,093	98.28	278,861,763	98.29	320,550,916	95.62
NO OFM	443,400	.20	1,552,180	.63	1,943,345	.68	12,041,398	3.59
EQUIPMENT (INV)	4,899,766	2.20	2,711,130	1.10	2,889,720	1.02	2,646,351	.79
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	26,057	.01	0	.0
<u>PROPULSION</u>	6,960,981	2.07	9,614,862	2.58	2,612,764	.66	2,393,289	.54
MATERIEL PROGRAM:								
FLYING HOURS	6,821,580	98.00	9,536,193	99.18	2,538,622	97.16	2,354,158	98.36
NO OFM	139,401	2.00	78,669	.82	74,142	2.84	39,131	1.64
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	335,513,389	100.00	373,032,649	100.00	397,665,843	100.00	445,277,083	100.00
MATERIEL PROGRAM:								
FLYING HOURS	326,151,668	97.21	365,381,268	97.95	388,424,844	97.68	427,527,703	96.01
NO OFM	2,950,732	.88	3,270,435	.88	4,197,937	1.06	14,458,809	3.25
EQUIPMENT (INV)	6,410,989	1.91	4,380,946	1.17	5,017,005	1.26	3,290,571	.74
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	26,057	.01	0	.0

Table A.13

MODEL/DESIGN/SERIES B052H, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	96,485,625	38.63	92,077,248	37.06	97,035,160	34.44	93,125,192	29.85
MATERIEL PROGRAM:								
FLYING HOURS	92,381,768	95.75	88,541,079	96.16	92,769,746	95.60	89,505,160	96.11
NO OFM	3,033,010	3.14	2,698,423	2.93	3,078,274	3.17	3,246,392	3.49
EQUIPMENT (INV)	1,063,026	1.10	837,746	.91	1,187,140	1.22	373,640	.40
SQUADRON MONTHS	7,821	.01	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	149,010,914	59.66	151,277,712	60.89	183,570,147	65.16	217,496,202	69.71
MATERIEL PROGRAM:								
FLYING HOURS	145,938,186	97.94	149,105,932	98.56	180,839,296	98.51	213,362,583	98.10
NO OFM	252,653	.17	792,473	.52	1,113,321	.61	2,643,074	1.22
EQUIPMENT (INV)	2,820,075	1.89	1,379,307	.91	1,602,982	.87	1,490,545	.69
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	14,548	.01	0	.0
<u>PROPULSION</u>	4,261,911	1.71	5,079,189	2.04	1,120,484	.40	1,397,610	.45
MATERIEL PROGRAM:								
FLYING HOURS	3,277,620	76.90	4,470,373	88.01	1,069,857	95.48	1,173,967	84.00
NO OFM	984,291	23.10	608,816	11.99	50,627	4.52	223,643	16.00
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	249,758,450	100.00	248,434,149	100.00	281,725,791	100.00	312,019,004	100.00
MATERIEL PROGRAM:								
FLYING HOURS	241,597,574	96.73	242,117,384	97.46	274,678,899	97.50	304,041,710	97.44
NO OFM	4,269,954	1.71	4,099,712	1.65	4,242,222	1.51	6,113,109	1.96
EQUIPMENT (INV)	3,883,101	1.55	2,217,053	.89	2,790,122	.99	1,864,185	.60
SQUADRON MONTHS	7,821	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	14,548	.01	0	.0

Table A.14
MODEL/DESIGN/SERIES B052H, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	28,929,274	40.73	27,898,009	37.55	28,803,702	37.94	28,669,901	37.23
MATERIEL PROGRAM:								
FLYING HOURS	27,546,244	95.22	26,302,592	94.28	27,259,759	94.64	27,061,507	94.39
NO OFM	1,206,029	4.17	1,440,138	5.16	1,404,191	4.88	1,472,731	5.14
EQUIPMENT (INV)	177,001	.61	155,279	.56	139,752	.49	135,663	.47
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	42,101,616	59.27	46,337,512	62.38	47,001,546	61.92	47,928,468	62.24
MATERIEL PROGRAM:								
FLYING HOURS	42,101,616	100.00	46,337,512	100.00	46,970,219	99.93	47,923,910	99.99
NO OFM	0	.0	0	.0	31,327	.07	4,558	.01
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	733	.0	50,571	.07	104,180	.14	401,813	.52
MATERIEL PROGRAM:								
FLYING HOURS	733	100.00	46,532	92.01	86,193	82.73	196,591	48.93
NO OFM	0	.0	4,039	7.99	17,987	17.27	205,222	51.07
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	71,031,623	100.00	74,286,092	100.00	75,909,428	100.00	77,000,182	100.00
MATERIEL PROGRAM:								
FLYING HOURS	69,648,593	98.05	72,686,636	97.85	74,316,171	97.90	75,182,008	97.64
NO OFM	1,206,029	1.70	1,444,177	1.94	1,453,505	1.91	1,482,511	2.19
EQUIPMENT (INV)	177,001	.25	155,279	.21	139,752	.18	135,663	.18
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.15

MODEL/DESIGN/SERIES B052H, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	67,556,351	37.80	64,179,239	36.85	68,231,458	33.15	64,455,291	27.43
MATERIEL PROGRAM:								
FLYING HOURS	64,835,524	95.97	62,238,487	96.98	65,509,987	96.01	62,443,653	96.88
NO OFM	1,826,981	2.70	1,258,285	1.96	1,674,083	2.45	1,773,661	2.75
EQUIPMENT (INV)	886,025	1.31	682,467	1.06	1,047,388	1.54	237,977	.37
SQUADRON MONTHS	7,821	.01	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	106,909,298	59.82	104,940,200	60.26	136,568,601	66.35	169,567,734	72.15
MATERIEL PROGRAM:								
FLYING HOURS	103,836,570	97.13	102,768,420	97.93	133,869,077	98.02	165,438,673	97.56
NO OFM	252,653	.24	792,473	.76	1,081,994	.79	2,638,516	1.56
EQUIPMENT (INV)	2,820,075	2.64	1,379,307	1.31	1,602,982	1.17	1,490,545	.88
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	14,548	.01	0	.0
<u>PROPULSION</u>	4,261,178	2.38	5,028,618	2.89	1,016,304	.49	995,797	.42
MATERIEL PROGRAM:								
FLYING HOURS	3,276,887	76.90	4,423,841	87.97	983,664	96.79	977,376	98.15
NO OFM	984,291	23.10	604,777	12.03	32,640	3.21	18,421	1.85
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	178,726,827	100.00	174,148,057	100.00	205,816,363	100.00	235,018,822	100.00
MATERIEL PROGRAM:								
FLYING HOURS	171,948,981	96.21	169,430,748	97.29	200,362,728	97.35	228,859,702	97.38
NO OFM	3,063,925	1.71	2,655,535	1.52	2,788,717	1.35	4,430,598	1.89
EQUIPMENT (INV)	3,706,100	2.07	2,061,774	1.18	2,650,370	1.29	1,728,522	.74
SQUADRON MONTHS	7,821	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	14,548	.01	0	.0

Table A.16
MODEL/DESIGN/SERIES C005A, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	250,608,835	75.15	242,826,831	70.82	248,791,400	71.20	257,836,587	70.27
MATERIEL PROGRAM:								
FLYING HOURS	213,797,091	85.31	201,701,312	83.06	206,904,473	83.16	223,739,897	86.78
NO OFM	31,880,451	12.72	35,865,874	14.77	36,892,290	14.83	28,612,870	11.10
EQUIPMENT (INV)	4,797,634	1.91	5,203,866	2.14	4,817,064	1.94	5,295,619	2.05
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	133,659	.05	55,779	.02	177,573	.07	188,201	.07
<u>AVIONICS</u>	80,796,503	24.23	97,544,347	28.45	98,016,139	28.05	107,672,855	29.35
MATERIEL PROGRAM:								
FLYING HOURS	80,680,696	99.86	96,669,067	99.10	97,474,775	99.45	101,272,887	94.06
NO OFM	110,958	.14	461,612	.47	515,931	.53	6,386,069	5.93
EQUIPMENT (INV)	4,849	.01	413,668	.42	25,433	.03	13,899	.01
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	2,050,816	.62	2,517,869	.73	2,640,490	.76	1,391,866	.38
MATERIEL PROGRAM:								
FLYING HOURS	2,012,312	98.12	2,408,197	95.64	2,446,044	92.64	1,391,866	100.00
NO OFM	38,504	1.88	109,672	4.36	194,446	7.36	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	333,456,154	100.00	342,889,047	100.00	349,448,029	100.00	366,901,308	100.00
MATERIEL PROGRAM:								
FLYING HOURS	296,490,099	88.91	300,778,576	87.72	306,825,292	87.80	326,404,650	88.96
NO OFM	32,029,913	9.61	36,437,158	10.63	37,602,667	10.76	34,998,939	9.54
EQUIPMENT (INV)	4,802,483	1.44	5,617,534	1.64	4,842,497	1.39	5,309,518	1.45
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	133,659	.04	55,779	.02	177,573	.05	188,201	.05

Table A.17
MODEL/DESIGN/SERIES C005A, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	247,294,892	75.08	239,415,009	70.70	244,424,056	71.03	252,668,083	70.08
MATERIEL PROGRAM:								
FLYING HOURS	210,778,655	85.23	198,569,616	82.94	202,856,235	82.99	218,833,427	86.61
NO OFM	31,861,247	12.88	35,804,346	14.95	36,713,488	15.02	28,457,259	11.26
EQUIPMENT (INV)	4,521,331	1.83	4,985,268	2.08	4,676,760	1.91	5,189,196	2.05
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	133,659	.05	55,779	.02	177,573	.07	188,201	.07
<u>AVIONICS</u>	80,023,695	24.30	96,694,117	28.55	97,058,810	28.20	106,472,024	29.53
MATERIEL PROGRAM:								
FLYING HOURS	79,917,311	99.87	95,831,672	99.11	96,530,691	99.46	100,084,605	94.00
NO OFM	101,535	.13	448,777	.46	502,686	.52	6,373,520	5.99
EQUIPMENT (INV)	4,849	.01	413,668	.43	25,433	.03	13,899	.01
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	2,050,816	.62	2,517,869	.74	2,640,490	.77	1,391,866	.39
MATERIEL PROGRAM:								
FLYING HOURS	2,012,312	98.12	2,408,197	95.64	2,446,044	92.64	1,391,866	100.00
NO OFM	38,504	1.88	109,672	4.36	194,446	7.36	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	329,369,403	100.00	338,626,995	100.00	344,123,356	100.00	360,531,973	100.00
MATERIEL PROGRAM:								
FLYING HOURS	292,708,278	88.87	296,809,485	87.65	301,832,970	87.71	320,309,898	88.84
NO OFM	32,001,286	9.72	36,362,795	10.74	37,410,620	10.87	34,830,779	9.66
EQUIPMENT (INV)	4,526,180	1.37	5,398,936	1.59	4,702,193	1.37	5,203,095	1.44
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	133,659	.04	55,779	.02	177,573	.05	188,201	.05

Table A.18
MODEL/DESIGN/SERIES C005A, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	3,313,943	81.09	3,411,822	80.05	4,367,344	82.02	5,168,504	81.15
MATERIEL PROGRAM:								
FLYING HOURS	3,018,436	91.08	3,131,696	91.79	4,048,238	92.69	4,906,470	94.93
NO OFM	19,204	.58	61,528	1.80	178,802	4.09	155,611	3.01
EQUIPMENT (INV)	276,303	8.34	218,598	6.41	140,304	3.21	106,423	2.06
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	772,808	18.91	850,230	19.95	957,329	17.98	1,200,831	18.85
MATERIEL PROGRAM:								
FLYING HOURS	763,385	98.78	837,395	98.49	944,084	98.62	1,188,282	98.95
NO OFM	9,423	1.22	12,835	1.51	13,245	1.38	12,549	1.05
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	4,086,751	100.00	4,262,052	100.00	5,324,673	100.00	6,369,335	100.00
MATERIEL PROGRAM:								
FLYING HOURS	3,781,821	92.54	3,969,091	93.13	4,992,322	93.76	6,094,752	95.69
NO OFM	28,627	.70	74,363	1.74	192,047	3.61	168,160	2.64
EQUIPMENT (INV)	276,303	6.76	218,598	5.13	140,304	2.63	106,423	1.67
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.19
MODEL/DESIGN/SERIES KC135A, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	172,104,724	60.63	181,759,885	58.03	213,797,664	64.05	201,623,172	59.00
MATERIEL PROGRAM:								
FLYING HOURS	164,634,846	95.66	173,254,510	95.32	206,239,849	96.46	195,124,253	96.78
NO OFM	3,650,794	2.12	4,867,222	2.68	5,282,825	2.47	4,282,329	2.12
EQUIPMENT (INV)	3,819,084	2.22	3,638,153	2.00	2,274,990	1.06	2,216,590	1.10
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	95,207,115	33.54	110,953,343	35.42	99,846,809	29.91	120,601,787	35.29
MATERIEL PROGRAM:								
FLYING HOURS	95,152,884	99.94	110,219,785	99.34	99,572,358	99.73	114,926,862	95.29
NO OFM	48,157	.05	727,484	.66	274,451	.27	281,010	.23
EQUIPMENT (INV)	0	.0	0	.0	0	.0	5,393,915	4.47
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	6,074	.01	6,074	.01	0	.0	0	.0
<u>PROPULSION</u>	16,533,922	5.82	20,500,199	6.55	20,154,206	6.04	19,531,241	5.71
MATERIEL PROGRAM:								
FLYING HOURS	15,344,880	92.81	19,320,438	94.25	18,811,769	93.34	18,471,189	94.57
NO OFM	1,130,292	6.84	1,121,084	5.47	1,280,196	6.35	1,060,052	5.43
EQUIPMENT (INV)	58,750	.36	58,677	.29	62,241	.31	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	283,845,761	100.00	313,213,427	100.00	333,798,679	100.00	341,756,200	100.00
MATERIEL PROGRAM:								
FLYING HOURS	275,132,610	96.93	302,794,733	96.67	324,623,976	97.25	328,522,304	96.13
NO OFM	4,829,243	1.70	6,715,790	2.14	6,837,472	2.05	5,623,391	1.65
EQUIPMENT (INV)	3,877,834	1.37	3,696,830	1.18	2,337,231	.70	7,610,505	2.23
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	6,074	.0	6,074	.0	0	.0	0	.0

Table A.20
MODEL/DESIGN/SERIES KC135A, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975	1976	1977	1978
	\$	\$	\$	\$
	%	%	%	%
AIRFRAME	4,609,026	2,817,818	3,121,874	4,731,256
	47.34	34.02	52.78	56.81
MATERIEL PROGRAM:				
FLYING HOURS	4,535,699	2,739,476	3,078,632	4,683,607
NO OFM	63,609	68,624	33,524	37,931
EQUIPMENT (INV)	9,718	9,718	9,718	9,718
SQUADRON MONTHS	0	0	0	0
UNKNOWN	0	0	0	0
AVIONICS	4,987,473	5,314,529	2,287,339	3,105,706
	51.23	64.16	38.67	37.29
MATERIEL PROGRAM:				
FLYING HOURS	4,981,399	5,308,455	2,284,424	3,101,657
NO OFM	0	0	2,915	4,049
EQUIPMENT (INV)	0	0	0	0
SQUADRON MONTHS	0	0	0	0
UNKNOWN	6,074	6,074	0	0
PROPULSION	139,239	151,451	505,137	491,134
	1.43	1.83	8.54	5.90
MATERIEL PROGRAM:				
FLYING HOURS	139,239	151,451	505,137	491,134
NO OFM	0	0	0	0
EQUIPMENT (INV)	0	0	0	0
SQUADRON MONTHS	0	0	0	0
UNKNOWN	0	0	0	0
TOTAL AIRCRAFT	9,735,738	8,283,798	5,914,350	8,328,096
	100.00	100.00	100.00	100.00
MATERIEL PROGRAM:				
FLYING HOURS	9,656,337	8,199,382	5,868,193	8,276,398
NO OFM	63,609	68,624	36,439	41,980
EQUIPMENT (INV)	9,718	9,718	9,718	9,718
SQUADRON MONTHS	0	0	0	0
UNKNOWN	6,074	6,074	0	0
	.06	.07	.16	.12
	99.18	98.98	99.22	99.38
	.65	.83	.62	.50
	.10	.12	.16	.12
	.0	.0	.0	.0
	.0	.0	.0	.0

Table A.21
MODEL/DESIGN/SERIES KC135A, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	167,495,698	61.11	178,942,067	58.68	210,675,790	64.25	196,891,916	59.05
MATERIEL PROGRAM:								
FLYING HOURS	160,099,147	95.58	170,515,034	95.29	203,161,217	96.43	190,440,646	96.72
NO OFM	3,587,185	2.14	4,798,598	2.68	5,249,301	2.49	4,244,398	2.16
EQUIPMENT (INV)	3,809,366	2.27	3,628,435	2.03	2,265,272	1.08	2,206,872	1.12
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	90,219,642	32.91	105,638,814	34.64	97,559,470	29.75	117,496,081	35.24
MATERIEL PROGRAM:								
FLYING HOURS	90,171,485	99.95	104,911,330	99.31	97,287,934	99.72	111,825,205	95.17
NO OFM	48,157	.05	727,484	.69	271,536	.28	276,961	.24
EQUIPMENT (INV)	0	.0	0	.0	0	.0	5,393,915	4.59
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	16,394,683	5.98	20,348,748	6.67	19,649,069	5.99	19,040,107	5.71
MATERIEL PROGRAM:								
FLYING HOURS	15,205,641	92.75	19,168,987	94.20	18,306,632	93.17	17,980,055	94.43
NO OFM	1,130,292	6.89	1,121,084	5.51	1,280,196	6.52	1,060,052	5.57
EQUIPMENT (INV)	58,750	.36	58,677	.29	62,241	.32	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	274,110,023	100.00	304,929,629	100.00	327,884,329	100.00	333,428,104	100.00
MATERIEL PROGRAM:								
FLYING HOURS	265,476,273	96.85	294,595,351	96.61	318,755,783	97.22	320,245,906	96.05
NO OFM	4,765,634	1.74	6,647,166	2.18	6,801,033	2.07	5,581,411	1.67
EQUIPMENT (INV)	3,868,116	1.41	3,687,112	1.21	2,327,513	.71	7,600,787	2.28
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.22
 MODEL/DESIGN/SERIES C141A, TOTAL SPARES INVESTMENT (1978\$),
 BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	271,419,896	66.52	271,105,775	65.81	268,539,390	65.49	314,835,835	67.18
MATERIEL PROGRAM:								
FLYING HOURS	264,325,098	97.39	263,790,060	97.30	258,470,758	96.25	297,285,064	94.43
NO OFM	5,501,094	2.03	6,022,041	2.22	8,800,398	3.28	13,769,949	4.37
EQUIPMENT (INV)	1,593,054	.59	1,293,061	.48	1,268,196	.47	951,502	.30
SQUADRON MONTHS	149	.0	112	.0	38	.0	0	.0
UNKNOWN	501	.0	501	.0	0	.0	2,829,320	.90
<u>AVIONICS</u>	127,580,917	31.27	132,424,565	32.15	132,962,476	32.42	145,592,364	31.07
MATERIEL PROGRAM:								
FLYING HOURS	126,616,015	99.24	131,443,022	99.26	131,339,775	98.78	144,749,431	99.42
NO OFM	964,902	.76	981,543	.74	1,622,701	1.22	842,933	.58
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	9,018,028	2.21	8,415,585	2.04	8,575,406	2.09	8,195,380	1.75
MATERIEL PROGRAM:								
FLYING HOURS	8,760,325	97.14	8,147,054	96.81	8,355,100	97.43	7,758,826	94.67
NO OFM	257,703	2.86	268,531	3.19	220,306	2.57	436,554	5.33
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	408,018,841	100.00	411,945,925	100.00	410,077,272	100.00	468,623,579	100.00
MATERIEL PROGRAM:								
FLYING HOURS	399,701,438	97.96	403,380,136	97.92	398,165,633	97.10	449,793,321	95.98
NO OFM	6,723,699	1.65	7,272,115	1.77	10,643,405	2.60	15,049,436	3.21
EQUIPMENT (INV)	1,593,054	.39	1,293,061	.31	1,268,196	.31	951,502	.20
SQUADRON MONTHS	149	.0	112	.0	38	.0	0	.0
UNKNOWN	501	.0	501	.0	0	.0	2,829,320	.60

Table A.23
MODEL/DESIGN/SERIES C141A, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975	1976	1977	1978
	\$	\$	\$	\$
	%	%	%	%
AIRFRAME	196,076,583	193,294,102	194,724,053	209,335,322
	79.75	86.24	79.94	81.42
MATERIEL PROGRAM:				
FLYING HOURS	190,561,578	187,699,088	185,835,365	193,146,514
NO OFM	4,812,775	5,196,827	8,201,459	13,004,500
EQUIPMENT (INV)	701,729	397,686	687,229	369,127
SQUADRON MONTHS	0	0	0	0
UNKNOWN	501	501	0	2,815,181
	.0	.0	.0	1.34
AVIONICS	42,256,245	23,801,206	41,740,645	41,009,084
	17.19	10.62	17.14	15.95
MATERIEL PROGRAM:				
FLYING HOURS	42,256,245	23,793,967	41,691,437	40,936,152
NO OFM	0	7,239	49,208	72,932
EQUIPMENT (INV)	0	0	0	0
SQUADRON MONTHS	0	0	0	0
UNKNOWN	0	0	0	0
	.0	.0	.0	.0
PROPULSION	7,522,764	7,045,179	7,125,168	6,746,296
	3.06	3.14	2.93	2.62
MATERIEL PROGRAM:				
FLYING HOURS	7,302,563	6,820,116	6,904,862	6,427,833
NO OFM	220,201	225,063	220,306	318,463
EQUIPMENT (INV)	0	0	0	0
SQUADRON MONTHS	0	0	0	0
UNKNOWN	0	0	0	0
	.0	.0	.0	.0
TOTAL AIRCRAFT	245,855,592	224,140,487	243,589,866	257,090,702
	100.00	100.00	100.00	100.00
MATERIEL PROGRAM:				
FLYING HOURS	240,120,386	218,313,171	234,431,664	240,510,499
NO OFM	5,032,976	5,429,129	8,470,973	13,395,895
EQUIPMENT (INV)	701,729	397,686	687,229	369,127
SQUADRON MONTHS	0	0	0	0
UNKNOWN	501	501	0	2,815,181
	.0	.0	.0	1.10
	97.67	97.40	96.24	93.55
	2.05	2.42	3.48	5.21
	.29	.18	.28	.14
	.0	.0	.0	.0
	.0	.0	.0	.0

Table A.24
MODEL/DESIGN/SERIES C141A, COMMONS SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	75,343,313	46.46	77,811,673	41.43	73,815,337	44.34	105,500,513	49.87
MATERIEL PROGRAM:								
FLYING HOURS	73,763,520	97.90	76,090,972	97.79	72,635,393	98.40	104,138,550	98.71
NO OFM	688,319	.91	825,214	1.06	598,939	.81	765,449	.73
EQUIPMENT (INV)	891,325	1.18	895,375	1.15	580,967	.79	582,375	.55
SQUADRON MONTHS	149	.0	112	.0	38	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	14,139	.01
<u>AVIONICS</u>	85,324,672	52.62	108,623,359	57.84	91,221,831	54.79	104,583,280	49.44
MATERIEL PROGRAM:								
FLYING HOURS	84,359,770	98.87	107,649,055	99.10	89,648,338	98.28	103,813,279	99.26
NO OFM	964,902	1.13	974,304	.90	1,573,493	1.72	770,001	.74
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	1,495,264	.92	1,370,406	.73	1,450,238	.87	1,449,084	.69
MATERIEL PROGRAM:								
FLYING HOURS	1,457,762	97.49	1,326,938	96.83	1,450,238	100.00	1,330,993	91.85
NO OFM	37,502	2.51	43,468	3.17	0	.0	118,091	8.15
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	162,163,249	100.00	187,805,438	100.00	166,487,406	100.00	211,532,877	100.00
MATERIEL PROGRAM:								
FLYING HOURS	159,581,052	98.41	185,066,965	98.54	163,733,969	98.35	209,282,822	98.94
NO OFM	1,690,723	1.04	1,842,986	.98	2,172,432	1.30	1,653,541	.78
EQUIPMENT (INV)	891,325	.55	895,375	.48	580,967	.35	582,375	.28
SQUADRON MONTHS	149	.0	112	.0	38	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	14,139	.01

Table A.25
MODEL/DESIGN/SERIES F004C, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	113,982,709	70.30	102,540,426	65.96	101,277,241	67.56	100,534,974	62.72
MATERIEL PROGRAM:								
FLYING HOURS	94,801,100	83.17	96,833,978	94.43	95,109,574	93.91	80,151,393	79.72
NO OFM	17,535,715	15.38	4,217,506	4.11	4,843,484	4.78	4,850,823	4.83
EQUIPMENT (INV)	998,055	.88	891,718	.87	1,003,755	.99	1,381,385	1.37
SQUADRON MONTHS	647,839	.57	597,224	.58	320,428	.32	31,339	.03
UNKNOWN	0	.0	0	.0	0	.0	14,120,034	14.04
<u>AVIONICS</u>	46,680,920	28.79	51,466,474	33.11	47,241,112	31.51	58,322,309	36.39
MATERIEL PROGRAM:								
FLYING HOURS	42,395,418	90.82	47,268,331	91.84	43,671,784	92.44	53,308,893	91.40
NO OFM	4,069	.01	186,030	.36	237,687	.50	2,524,925	4.33
EQUIPMENT (INV)	4,281,433	9.17	4,005,115	7.78	3,324,718	7.04	2,488,491	4.27
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	6,998	.01	6,923	.01	0	.0
<u>PROPULSION</u>	1,480,340	.91	1,441,139	.93	1,393,893	.93	1,426,097	.89
MATERIEL PROGRAM:								
FLYING HOURS	1,166,311	78.79	1,144,925	79.45	1,146,787	82.27	1,221,316	85.64
NO OFM	314,029	21.21	296,214	20.55	247,106	17.73	204,781	14.36
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	162,143,969	100.00	155,448,039	100.00	149,912,246	100.00	160,283,380	100.00
MATERIEL PROGRAM:								
FLYING HOURS	138,362,829	85.33	145,247,234	93.44	139,928,145	93.34	134,681,602	84.03
NO OFM	17,853,813	11.01	4,699,750	3.02	5,328,277	3.55	7,580,529	4.73
EQUIPMENT (INV)	5,279,488	3.26	4,896,833	3.15	4,328,473	2.89	3,869,876	2.41
SQUADRON MONTHS	647,839	.40	597,224	.38	320,428	.21	31,339	.02
UNKNOWN	0	.0	6,998	.0	6,923	.0	14,120,034	8.81

Table A.26
MODEL/DESIGN/SERIES F004C, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	25,964,383	56.11	15,863,213	41.21	14,561,601	42.58	13,709,148	32.54
MATERIEL PROGRAM:								
FLYING HOURS	12,279,700	47.29	13,354,433	84.18	11,792,284	80.98	11,338,426	82.71
NO OFM	13,583,585	52.32	2,437,574	15.37	2,753,079	18.91	2,309,533	16.85
EQUIPMENT (INV)	1,945	.01	1,945	.01	0	.0	29,850	.22
SQUADRON MONTHS	99,153	.38	69,261	.44	16,238	.11	31,339	.23
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	20,252,667	43.77	22,571,851	58.64	19,583,141	57.26	28,352,665	67.30
MATERIEL PROGRAM:								
FLYING HOURS	19,909,697	98.31	22,197,290	98.34	19,166,406	97.87	27,895,143	98.39
NO OFM	0	.0	0	.0	1,848	.01	117,307	.41
EQUIPMENT (INV)	342,970	1.69	374,561	1.66	414,887	2.12	340,215	1.20
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	53,530	.12	54,306	.14	53,530	.16	67,494	.16
MATERIEL PROGRAM:								
FLYING HOURS	53,530	100.00	54,306	100.00	53,530	100.00	67,494	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	46,270,580	100.00	38,489,370	100.00	34,198,272	100.00	42,129,307	100.00
MATERIEL PROGRAM:								
FLYING HOURS	32,242,927	69.68	35,606,029	92.51	31,012,220	90.68	39,301,063	93.29
NO OFM	13,583,585	29.36	2,437,574	6.33	2,754,927	8.06	2,426,840	5.76
EQUIPMENT (INV)	344,915	.75	376,506	.98	414,887	1.21	370,065	.88
SQUADRON MONTHS	99,153	.21	69,261	.18	16,238	.05	31,339	.07
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.27
MODEL/DESIGN/SERIES F004C, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	88,018,326	75.96	86,677,213	74.11	86,715,640	74.94	86,825,826	73.49
MATERIEL PROGRAM:								
FLYING HOURS	82,521,400	93.75	83,479,545	96.31	83,317,290	96.08	68,812,967	79.25
NO OFM	3,952,130	4.49	1,779,932	2.05	2,090,405	2.41	2,541,290	2.93
EQUIPMENT (INV)	996,110	1.13	889,773	1.03	1,003,755	1.16	1,351,535	1.56
SQUADRON MONTHS	548,686	.62	527,963	.61	304,190	.35	0	.0
UNKNOWN	0	.0	0	.0	0	.0	14,120,034	16.26
<u>AVIONICS</u>	26,428,253	22.81	28,894,623	24.70	27,657,971	23.90	29,969,644	25.36
MATERIEL PROGRAM:								
FLYING HOURS	22,485,721	85.08	25,071,041	86.77	24,505,378	88.60	25,413,750	84.80
NO OFM	4,069	.02	186,030	.64	235,839	.85	2,407,618	8.03
EQUIPMENT (INV)	3,938,463	14.90	3,630,554	12.56	2,909,831	10.52	2,148,276	7.17
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	6,998	.02	6,923	.03	0	.0
<u>PROPULSION</u>	1,426,810	1.23	1,386,833	1.19	1,340,363	1.16	1,358,603	1.15
MATERIEL PROGRAM:								
FLYING HOURS	1,112,781	77.99	1,090,619	78.64	1,093,257	81.56	1,153,822	84.93
NO OFM	314,029	22.01	296,214	21.36	247,106	18.44	204,781	15.07
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	115,873,389	100.00	116,958,669	100.00	115,713,974	100.00	118,154,073	100.00
MATERIEL PROGRAM:								
FLYING HOURS	106,119,902	91.58	109,641,205	93.74	108,915,925	94.13	95,380,539	80.73
NO OFM	4,270,228	3.69	2,262,176	1.93	2,573,350	2.22	5,153,689	4.36
EQUIPMENT (INV)	4,934,573	4.26	4,520,327	3.86	3,913,586	3.38	3,499,811	2.96
SQUADRON MONTHS	548,686	.47	527,963	.45	304,190	.26	0	.0
UNKNOWN	0	.0	6,998	.01	6,923	.01	14,120,034	11.95

Table A.28
MODEL/DESIGN/SERIES RF004C, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	130,222,464	40.65	131,695,083	39.38	136,787,172	38.16	144,329,477	39.10
MATERIEL PROGRAM:								
FLYING HOURS	128,848,932	98.95	128,768,335	97.78	133,049,676	97.27	117,331,529	81.29
NO OFM	1,226,117	.94	2,764,426	2.10	3,585,440	2.62	4,391,316	3.04
EQUIPMENT (INV)	117,292	.09	107,369	.08	142,926	.10	168,609	.12
SQUADRON MONTHS	30,123	.02	54,953	.04	9,130	.01	0	.0
UNKNOWN	0	.0	0	.0	0	.0	22,438,023	15.55
<u>AVIONICS</u>	188,088,039	58.71	200,719,362	60.02	219,631,734	61.27	222,615,870	60.31
MATERIEL PROGRAM:								
FLYING HOURS	185,357,067	98.55	198,010,054	98.65	215,242,996	98.00	200,394,639	90.02
NO OFM	1,558,723	.83	1,607,484	.80	3,767,986	1.72	22,140,302	9.95
EQUIPMENT (INV)	1,155,478	.61	1,086,730	.54	620,752	.28	8,280	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	16,771	.01	15,094	.01	0	.0	72,649	.03
<u>PROPULSION</u>	2,071,936	.65	1,979,443	.59	2,025,419	.57	2,164,626	.59
MATERIEL PROGRAM:								
FLYING HOURS	1,614,032	77.90	1,554,854	78.55	1,653,245	81.62	1,839,711	84.99
NO OFM	457,904	22.10	424,589	21.45	372,174	18.38	324,915	15.01
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	320,382,439	100.00	334,393,888	100.00	358,444,325	100.00	369,109,973	100.00
MATERIEL PROGRAM:								
FLYING HOURS	315,820,031	98.58	328,333,243	98.19	349,945,917	97.63	319,565,879	86.58
NO OFM	3,242,744	1.01	4,796,499	1.43	7,725,600	2.16	26,856,533	7.28
EQUIPMENT (INV)	1,272,770	.40	1,194,099	.36	763,678	.21	176,889	.05
SQUADRON MONTHS	30,123	.01	54,953	.02	9,130	.0	0	.0
UNKNOWN	16,771	.01	15,094	.0	0	.0	22,510,672	6.10

Table A.29
MODEL/DESIGN/SERIES RF004C, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	15,197,873	10.51	15,850,022	10.53	15,420,161	9.37	15,487,328	9.29
MATERIEL PROGRAM:								
FLYING HOURS	15,108,571	99.41	15,724,842	99.21	14,890,462	96.56	14,882,156	96.09
NO OFM	75,329	.50	109,489	.69	523,692	3.40	601,531	3.88
EQUIPMENT (INV)	2,510	.02	4,228	.03	2,813	.02	3,641	.02
SQUADRON MONTHS	11,463	.08	11,463	.07	3,194	.02	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	129,412,505	89.49	134,658,618	89.47	149,117,138	90.63	151,259,085	90.71
MATERIEL PROGRAM:								
FLYING HOURS	127,944,039	98.87	133,378,168	99.05	146,252,675	98.08	130,146,926	86.04
NO OFM	1,451,695	1.12	1,265,356	.94	2,864,463	1.92	21,112,159	13.96
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	16,771	.01	15,094	.01	0	.0	0	.0
<u>PROPULSION</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	144,610,378	100.00	150,508,640	100.00	164,537,299	100.00	166,746,413	100.00
MATERIEL PROGRAM:								
FLYING HOURS	143,052,610	98.92	149,103,010	99.07	161,143,137	97.94	145,029,082	86.98
NO OFM	1,527,024	1.06	1,374,845	.91	3,388,155	2.06	21,713,690	13.02
EQUIPMENT (INV)	2,510	.0	4,228	.0	2,813	.0	3,641	.0
SQUADRON MONTHS	11,463	.01	11,463	.01	3,194	.0	0	.0
UNKNOWN	16,771	.01	15,094	.01	0	.0	0	.0

Table A.30
MODEL/DESIGN/SERIES RFO04C, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
AIRFRAME	115,024,591	65.44	115,845,061	63.00	121,367,011	62.59	128,842,149	63.67
MATERIEL PROGRAM:								
FLYING HOURS	113,740,361	98.88	113,043,493	97.58	118,159,214	97.36	102,449,373	79.52
NO OFM	1,150,788	1.00	2,654,937	2.29	3,061,748	2.52	3,789,785	2.94
EQUIPMENT (INV)	114,782	.10	103,141	.09	140,113	.12	164,968	.13
SQUADRON MONTHS	18,660	.02	43,490	.04	5,936	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	22,438,023	17.42
AVIONICS	58,675,534	33.38	66,060,744	35.92	70,514,596	36.37	71,356,785	35.26
MATERIEL PROGRAM:								
FLYING HOURS	57,413,028	97.85	64,631,886	97.84	68,990,321	97.84	70,247,713	98.45
NO OFM	107,028	.18	342,128	.52	903,523	1.28	1,028,143	1.44
EQUIPMENT (INV)	1,155,478	1.97	1,086,730	1.65	620,752	.88	8,280	.01
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	72,649	.10
PROPULSION	2,071,936	1.18	1,979,443	1.08	2,025,419	1.04	2,164,626	1.07
MATERIEL PROGRAM:								
FLYING HOURS	1,614,032	77.90	1,554,854	78.55	1,653,245	81.62	1,839,711	84.99
NO OFM	457,904	22.10	424,589	21.45	372,174	18.38	324,915	15.01
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
TOTAL AIRCRAFT	175,772,061	100.00	183,885,248	100.00	193,907,026	100.00	202,363,560	100.00
MATERIEL PROGRAM:								
FLYING HOURS	172,767,421	98.29	179,230,233	97.47	188,802,780	97.37	174,536,797	86.25
NO OFM	1,715,720	.98	3,421,654	1.86	4,337,445	2.24	5,142,843	2.54
EQUIPMENT (INV)	1,270,260	.72	1,189,871	.65	760,865	.39	173,248	.09
SQUADRON MONTHS	18,660	.01	43,490	.02	5,936	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	22,510,672	11.12

Table A.31
MODEL/DESIGN/SERIES F004D, TOTAL SPARES INVESTMENT (1978S),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	154,953,838	53.31	163,946,891	51.67	155,888,061	52.12	157,073,777	49.91
MATERIEL PROGRAM:								
FLYING HOURS	152,209,332	98.23	159,120,313	97.06	149,843,999	96.12	126,822,609	80.74
NO OFM	1,297,110	.84	3,333,373	2.03	5,297,714	3.40	4,991,156	3.18
EQUIPMENT (INV)	176,055	.11	144,223	.09	165,311	.11	1,064,681	.68
SQUADRON MONTHS	1,271,341	.82	1,348,982	.82	581,037	.37	0	.0
UNKNOWN	0	.0	0	.0	0	.0	24,195,331	15.40
<u>AVIONICS</u>	133,292,162	45.86	150,941,730	47.57	140,905,822	47.11	155,322,525	49.35
MATERIEL PROGRAM:								
FLYING HOURS	126,335,141	94.78	143,944,333	95.36	135,080,184	95.87	146,482,433	94.31
NO OFM	10,461	.01	337,290	.22	199,080	.14	4,803,063	3.09
EQUIPMENT (INV)	6,933,504	5.20	6,647,051	4.40	5,623,449	3.99	4,037,029	2.60
SQUADRON MONTHS	13,056	.01	13,056	.01	3,109	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	2,435,055	.84	2,432,061	.77	2,275,769	.76	2,324,444	.74
MATERIEL PROGRAM:								
FLYING HOURS	1,896,016	77.86	1,909,229	78.50	1,856,214	81.56	1,974,082	84.93
NO OFM	539,039	22.14	522,832	21.50	419,555	18.44	350,362	15.07
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	290,681,055	100.00	317,320,682	100.00	299,069,652	100.00	314,720,746	100.00
MATERIEL PROGRAM:								
FLYING HOURS	280,440,489	96.48	304,973,875	96.11	286,780,397	95.89	275,279,124	87.47
NO OFM	1,846,610	.64	4,193,495	1.32	5,916,349	1.98	10,144,581	3.22
EQUIPMENT (INV)	7,109,559	2.45	6,791,274	2.14	5,788,760	1.94	5,101,710	1.62
SQUADRON MONTHS	1,284,397	.44	1,362,038	.43	584,166	.20	0	.0
UNKNOWN	0	.0	0	.0	0	.0	24,195,331	7.69

Table A.32
MODEL/DESIGN/SERIES F004D, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	3,132,428	4.67	3,809,813	4.64	3,780,102	5.02	3,058,858	3.86
MATERIEL PROGRAM:								
FLYING HOURS	2,789,700	89.06	3,375,633	88.60	2,291,126	60.61	2,647,478	86.55
NO OFM	0	.0	27,887	.73	1,448,975	38.33	296,996	9.71
EQUIPMENT (INV)	27,042	.86	0	.0	0	.0	114,384	3.74
SQUADRON MONTHS	315,686	10.08	406,293	10.66	40,001	1.06	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	63,961,916	95.33	78,287,301	95.36	71,564,345	94.98	76,223,370	96.14
MATERIEL PROGRAM:								
FLYING HOURS	63,948,860	99.98	78,274,245	99.98	71,493,261	99.90	75,437,139	98.97
NO OFM	0	.0	0	.0	9,948	.01	773,175	1.01
EQUIPMENT (INV)	0	.0	0	.0	58,027	.08	13,056	.02
SQUADRON MONTHS	13,056	.02	11,056	.02	3,109	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	67,094,344	100.00	82,097,114	100.00	75,344,447	100.00	79,282,228	100.00
MATERIEL PROGRAM:								
FLYING HOURS	66,738,560	99.47	81,649,878	99.46	73,784,387	97.93	78,084,617	98.49
NO OFM	0	.0	27,887	.03	1,458,923	1.94	1,070,171	1.35
EQUIPMENT (INV)	27,042	.04	0	.0	58,027	.08	127,440	.16
SQUADRON MONTHS	328,742	.49	419,349	.51	43,110	.06	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.33
MODEL/DESIGN/SERIES F004D, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	151,821,410	67.90	160,137,078	68.08	152,107,959	67.99	154,014,919	65.42
MATERIEL PROGRAM:								
FLYING HOURS	149,419,632	98.42	155,744,680	97.26	147,552,873	97.01	124,175,131	80.63
NO OFM	1,297,110	.85	3,305,486	2.06	3,848,739	2.53	4,694,160	3.05
EQUIPMENT (INV)	149,013	.10	144,223	.09	165,311	.11	950,297	.62
SQUADRON MONTHS	955,655	.63	942,689	.59	541,036	.36	0	.0
UNKNOWN	0	.0	0	.0	0	.0	24,195,331	15.71
<u>AVIONICS</u>	69,330,246	31.01	72,654,429	30.89	69,341,477	30.99	79,099,155	33.60
MATERIEL PROGRAM:								
FLYING HOURS	62,386,281	89.98	65,670,088	90.39	63,586,923	91.70	71,045,294	89.82
NO OFM	10,461	.02	337,290	.46	189,132	.27	4,029,888	5.09
EQUIPMENT (INV)	6,933,504	10.00	6,647,051	9.15	5,565,422	8.03	4,023,973	5.09
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	2,435,055	1.09	2,432,061	1.03	2,275,769	1.02	2,324,444	.99
MATERIEL PROGRAM:								
FLYING HOURS	1,896,016	77.86	1,909,229	78.50	1,856,214	81.56	1,974,082	84.93
NO OFM	539,039	22.14	522,832	21.50	419,555	18.44	350,362	15.07
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	223,586,711	100.00	235,223,568	100.00	223,725,205	100.00	235,438,518	100.00
MATERIEL PROGRAM:								
FLYING HOURS	213,701,929	95.58	223,323,997	94.94	212,996,010	95.20	197,194,507	83.76
NO OFM	1,846,610	.83	4,165,608	1.77	4,457,426	1.99	9,074,410	3.85
EQUIPMENT (INV)	7,082,517	3.17	6,791,274	2.89	5,730,733	2.56	4,974,270	2.11
SQUADRON MONTHS	955,655	.43	942,689	.40	541,036	.24	0	.0
UNKNOWN	0	.0	0	.0	0	.0	24,195,331	10.28

Table A.34

MODEL/DESIGN/SERIES F004E, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	184,750,166	56.82	190,898,743	55.05	216,303,047	55.95	202,151,687	50.34
MATERIEL PROGRAM:								
FLYING HOURS	181,574,727	98.28	187,169,780	98.05	211,053,375	97.57	155,763,171	77.05
NO OFM	2,376,058	1.29	2,667,317	1.40	3,991,930	1.85	4,758,777	2.35
EQUIPMENT (INV)	222,365	.12	204,791	.11	296,397	.14	1,543,178	.76
SQUADRON MONTHS	577,016	.31	856,855	.45	961,345	.44	0	.0
UNKNOWN	0	.0	0	.0	0	.0	40,086,561	19.83
<u>AVIONICS</u>	137,273,897	42.22	152,535,995	43.98	166,550,300	43.08	195,552,814	48.70
MATERIEL PROGRAM:								
FLYING HOURS	130,237,128	94.87	144,685,153	94.85	158,440,573	95.13	181,980,138	93.06
NO OFM	79,163	.06	502,895	.33	196,323	.12	7,249,734	3.71
EQUIPMENT (INV)	6,957,606	5.07	7,347,947	4.82	7,912,145	4.75	6,321,683	3.23
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	1,259	.0	1,259	.0
<u>PROPULSION</u>	3,125,499	.96	3,367,903	.97	3,777,141	.98	3,877,311	.97
MATERIEL PROGRAM:								
FLYING HOURS	2,435,863	77.94	2,647,289	78.60	3,084,629	81.67	3,297,091	85.04
NO OFM	689,636	22.06	720,614	21.40	692,512	18.33	580,220	14.96
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	325,149,562	100.00	346,802,641	100.00	386,630,488	100.00	401,581,812	100.00
MATERIEL PROGRAM:								
FLYING HOURS	314,247,718	96.65	334,502,222	96.45	372,578,577	96.37	341,040,400	84.92
NO OFM	3,144,857	.97	3,890,826	1.12	4,880,765	1.26	12,588,731	3.13
EQUIPMENT (INV)	7,179,971	2.21	7,552,738	2.18	8,208,542	2.12	7,864,861	1.96
SQUADRON MONTHS	577,016	.18	856,855	.25	961,345	.25	0	.0
UNKNOWN	0	.0	0	.0	1,259	.0	40,087,820	9.98

Table A.35
MODEL/DESIGN/SERIES F004E, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	13,682,198	16.73	14,496,336	16.54	15,354,506	15.09	10,591,262	17.07
MATERIEL PROGRAM:								
FLYING HOURS	13,163,238	96.21	13,007,607	89.73	13,341,134	86.89	8,274,052	78.12
NO OFM	86,231	.63	975,926	6.73	1,513,691	9.86	1,819,040	17.17
EQUIPMENT (INV)	35,054	.26	19,233	.13	22,293	.15	498,170	4.70
SQUADRON MONTHS	397,675	2.91	493,570	3.40	477,388	3.11	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	68,087,487	83.27	73,163,339	83.46	86,381,782	84.91	51,461,102	82.93
MATERIEL PROGRAM:								
FLYING HOURS	68,014,758	99.89	73,125,328	99.95	86,179,070	99.77	50,610,769	98.35
NO OFM	72,729	.11	38,011	.05	182,202	.21	826,417	1.61
EQUIPMENT (INV)	0	.0	0	.0	19,251	.02	22,657	.04
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	1,259	.0	1,259	.0
<u>PROPULSION</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	81,769,685	100.00	87,659,675	100.00	101,736,288	100.00	62,052,364	100.00
MATERIEL PROGRAM:								
FLYING HOURS	81,177,996	99.28	86,132,935	98.26	99,520,204	97.82	58,884,821	94.90
NO OFM	158,960	.19	1,013,937	1.16	1,695,893	1.67	2,645,457	4.26
EQUIPMENT (INV)	35,054	.04	19,233	.02	41,544	.04	520,827	.84
SQUADRON MONTHS	397,675	.49	493,570	.56	477,388	.47	0	.0
UNKNOWN	0	.0	0	.0	1,259	.0	1,259	.0

Table A.36
MODEL/DESIGN/SERIES F004E, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	171,067,968	70.29	176,402,407	68.07	200,948,541	70.53	191,560,425	56.42
MATERIEL PROGRAM:								
FLYING HOURS	168,411,489	98.45	174,162,173	98.73	197,712,241	98.39	147,489,119	76.99
NO OFM	2,289,827	1.34	1,691,391	.96	2,478,239	1.23	2,939,737	1.53
EQUIPMENT (INV)	187,311	.11	185,558	.11	274,104	.14	1,045,008	.55
SQUADRON MONTHS	179,341	.10	363,285	.21	483,957	.24	0	.0
UNKNOWN	0	.0	0	.0	0	.0	40,086,561	20.93
<u>AVIONICS</u>	69,186,410	28.43	79,372,656	30.63	80,168,518	28.14	144,091,712	42.44
MATERIEL PROGRAM:								
FLYING HOURS	62,222,370	89.93	71,559,825	90.16	72,261,503	90.14	131,369,369	91.17
NO OFM	6,434	.01	464,884	.59	14,121	.02	6,423,317	4.46
EQUIPMENT (INV)	6,957,606	10.06	7,347,947	9.26	7,892,894	9.85	6,299,026	4.37
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	3,125,499	1.28	3,367,903	1.30	3,777,141	1.33	3,877,311	1.14
MATERIEL PROGRAM:								
FLYING HOURS	2,435,863	77.94	2,647,289	78.60	3,084,629	81.67	3,297,091	85.04
NO OFM	689,636	22.06	720,614	21.40	692,512	18.33	580,220	14.96
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	243,379,877	100.00	259,142,966	100.00	284,894,200	100.00	339,529,448	100.00
MATERIEL PROGRAM:								
FLYING HOURS	233,069,722	95.76	248,369,287	95.84	273,058,373	95.85	282,155,579	83.10
NO OFM	2,985,897	1.23	2,876,889	1.11	3,184,872	1.12	9,943,274	2.93
EQUIPMENT (INV)	7,144,917	2.94	7,533,505	2.91	8,166,998	2.87	7,344,034	2.16
SQUADRON MONTHS	179,341	.07	363,285	.14	483,957	.17	0	.0
UNKNOWN	0	.0	0	.0	0	.0	40,086,561	11.81

Table A.37
MODEL/DESIGN/SERIES FO15A, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	3,438,059	25.12	16,568,544	40.50	74,495,747	48.21	141,180,690	49.14
MATERIEL PROGRAM:								
FLYING HOURS	2,921,762	84.98	15,427,788	93.11	69,753,935	93.63	109,949,690	77.88
NO OFM	337,970	9.83	335,287	2.02	2,809,172	3.77	3,327,168	2.36
EQUIPMENT (INV)	175,235	5.10	800,788	4.83	1,915,858	2.57	27,892,832	19.76
SQUADRON MONTHS	0	.0	1,442	.01	13,059	.02	0	.0
UNKNOWN	3,092	.09	3,239	.02	3,723	.0	11,000	.01
<u>AVIONICS</u>	9,914,612	72.45	21,673,122	52.98	72,166,167	46.70	136,977,051	47.68
MATERIEL PROGRAM:								
FLYING HOURS	9,543,963	96.26	21,588,202	99.61	71,571,727	99.18	134,952,416	98.52
NO OFM	126,262	1.27	59,565	.27	435,944	.60	1,019,629	.74
EQUIPMENT (INV)	230,287	2.32	25,355	.12	157,385	.22	1,005,006	.73
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	14,100	.14	0	.0	1,111	.0	0	.0
<u>PROPULSION</u>	333,029	2.43	2,668,475	6.52	7,867,440	5.09	9,118,735	3.17
MATERIEL PROGRAM:								
FLYING HOURS	299,761	90.01	2,541,169	95.23	7,612,425	96.76	8,550,833	93.77
NO OFM	33,268	9.99	127,306	4.77	255,015	3.24	567,902	6.23
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	13,685,700	100.00	40,910,141	100.00	154,529,354	100.00	287,276,476	100.00
MATERIEL PROGRAM:								
FLYING HOURS	12,765,486	93.28	39,557,159	96.69	148,938,087	96.38	253,452,939	88.23
NO OFM	497,500	3.64	522,158	1.28	3,500,131	2.27	4,914,699	1.71
EQUIPMENT (INV)	405,522	2.96	826,143	2.02	2,073,243	1.34	28,897,838	10.06
SQUADRON MONTHS	0	.0	1,442	.0	13,059	.01	0	.0
UNKNOWN	17,192	.13	3,239	.01	4,834	.0	11,000	.0

Table A.38
MODEL/DESIGN/SERIES FO15A, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	155,740	37.31	1,092,322	91.82	2,945,302	93.05	26,466,958	97.03
MATERIEL PROGRAM:								
FLYING HOURS	57,635	37.01	471,048	43.12	1,457,876	49.50	330,672	1.25
NO OFM	5,012	3.22	44,370	4.06	173,165	5.88	217,973	.82
EQUIPMENT (INV)	93,093	59.77	576,904	52.81	1,314,261	44.62	25,918,313	97.93
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	261,666	62.69	52,671	4.43	213,577	6.75	803,669	2.95
MATERIEL PROGRAM:								
FLYING HOURS	20,263	7.74	34,801	66.07	156,971	73.50	13,309	1.66
NO OFM	0	.0	4,652	8.83	18,126	8.49	18,126	2.26
EQUIPMENT (INV)	227,303	86.87	13,218	25.10	38,480	18.02	772,234	96.09
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	14,100	5.39	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	44,595	3.75	6,370	.20	6,370	.02
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	44,595	100.00	6,370	100.00	6,370	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	417,406	100.00	1,189,588	100.00	3,165,249	100.00	27,276,997	100.00
MATERIEL PROGRAM:								
FLYING HOURS	77,898	18.66	550,444	46.27	1,621,217	51.22	350,351	1.28
NO OFM	5,012	1.20	49,022	4.12	191,291	6.04	236,099	.87
EQUIPMENT (INV)	320,396	76.76	590,122	49.61	1,352,741	42.74	26,690,547	97.85
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	14,100	3.38	0	.0	0	.0	0	.0

Table A.39
MODEL/DESIGN/SERIES F015A, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	3,282,319	24.74	15,476,222	38.96	71,550,445	47.27	114,713,732	44.12
MATERIEL PROGRAM:								
FLYING HOURS	2,864,127	87.26	14,956,740	96.64	68,296,059	95.45	109,619,018	95.56
NO OFM	332,958	10.14	290,917	1.88	2,636,007	3.68	3,109,195	2.71
EQUIPMENT (INV)	82,142	2.50	223,884	1.45	601,597	.84	1,974,519	1.72
SQUADRON MONTHS	0	.0	1,442	.01	13,059	.02	0	.0
UNKNOWN	3,092	.09	3,239	.02	3,723	.01	11,000	.01
<u>AVIONICS</u>	9,652,946	72.75	21,620,451	54.43	71,952,590	47.54	136,173,382	52.37
MATERIEL PROGRAM:								
FLYING HOURS	9,523,700	98.66	21,553,401	99.69	71,414,756	99.25	134,939,107	99.09
NO OFM	126,262	1.31	54,913	.25	417,818	.58	1,001,503	.74
EQUIPMENT (INV)	2,984	.03	12,137	.06	118,905	.17	232,772	.17
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	1,111	.0	0	.0
<u>PROPULSION</u>	333,029	2.51	2,623,880	6.61	7,861,070	5.19	9,112,365	3.50
MATERIEL PROGRAM:								
FLYING HOURS	299,761	90.01	2,496,574	95.15	7,606,055	96.76	8,544,463	93.77
NO OFM	33,268	9.99	127,306	4.85	255,015	3.24	567,902	6.23
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	13,268,294	100.00	39,720,553	100.00	151,364,105	100.00	259,999,479	100.00
MATERIEL PROGRAM:								
FLYING HOURS	12,687,588	95.62	39,006,715	98.20	147,316,870	97.33	253,102,588	97.35
NO OFM	492,488	3.71	473,136	1.19	3,308,840	2.19	4,678,600	1.80
EQUIPMENT (INV)	85,126	.64	236,021	.59	720,502	.48	2,207,291	.85
SQUADRON MONTHS	0	.0	1,442	.0	13,059	.01	0	.0
UNKNOWN	3,092	.02	3,239	.01	4,834	.0	11,000	.0

Table A.40
MODEL/DESIGN/SERIES TF015A, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	1,236,959	25.52	5,124,706	41.34	10,384,751	50.01	20,204,379	45.18
MATERIEL PROGRAM:								
FLYING HOURS	1,081,940	87.47	4,940,085	96.40	9,875,737	95.10	19,306,392	95.56
NO OFM	120,354	9.73	99,952	1.95	420,815	4.05	585,474	2.90
EQUIPMENT (INV)	33,547	2.71	83,636	1.63	87,682	.84	311,580	1.54
SQUADRON MONTHS	0	.0	62	.0	31	.0	0	.0
UNKNOWN	1,118	.09	971	.02	486	.0	933	.0
<u>AVIONICS</u>	3,488,555	71.97	6,483,394	52.30	9,351,664	45.04	22,853,325	51.10
MATERIEL PROGRAM:								
FLYING HOURS	3,442,906	98.69	6,466,448	99.74	9,296,388	99.41	22,684,327	99.26
NO OFM	45,649	1.31	16,456	.25	54,787	.59	168,998	.74
EQUIPMENT (INV)	0	.0	490	.01	344	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	145	.0	0	.0
<u>PROPULSION</u>	121,967	2.52	788,929	6.36	1,027,310	4.95	1,664,813	3.72
MATERIEL PROGRAM:								
FLYING HOURS	109,941	90.14	750,780	95.16	994,036	96.76	1,569,329	94.26
NO OFM	12,026	9.86	38,149	4.84	33,274	3.24	95,484	5.74
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	4,847,481	100.00	12,397,029	100.00	20,763,725	100.00	44,722,517	100.00
MATERIEL PROGRAM:								
FLYING HOURS	4,634,787	95.61	12,157,313	98.07	20,166,161	97.12	43,560,048	97.40
NO OFM	178,029	3.67	154,557	1.25	508,876	2.45	849,956	1.90
EQUIPMENT (INV)	33,547	.69	84,126	.68	88,026	.42	311,580	.70
SQUADRON MONTHS	0	.0	62	.0	31	.0	0	.0
UNKNOWN	1,118	.02	971	.01	631	.0	933	.0

Table A.41
MODEL/DESIGN/SERIES TF015A, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	55,346	97.21	353,714	99.26	903,810	99.82	185,415	85.95
MATERIEL PROGRAM:								
FLYING HOURS	50,845	91.87	340,180	96.17	836,197	92.52	136,084	73.39
NO OFM	0	.0	4,533	1.28	66,435	7.35	48,832	26.34
EQUIPMENT (INV)	4,501	8.13	9,001	2.54	1,178	.13	499	.27
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	0	.0	0	.0	0	.0	28,199	13.07
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	28,199	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	1,586	2.79	2,643	.74	1,586	.18	2,114	.98
MATERIEL PROGRAM:								
FLYING HOURS	1,586	100.00	2,643	100.00	1,586	100.00	2,114	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	56,932	100.00	356,357	100.00	905,396	100.00	215,728	100.00
MATERIEL PROGRAM:								
FLYING HOURS	52,431	92.09	342,823	96.20	837,783	92.53	166,397	77.13
NO OFM	0	.0	4,533	1.27	66,435	7.34	48,832	22.64
EQUIPMENT (INV)	4,501	7.91	9,001	2.53	1,178	.13	499	.23
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.42
MODEL/DESIGN/SERIES TF015A, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	1,181,613	24.67	4,770,992	39.62	9,480,941	47.74	20,018,964	44.98
MATERIEL PROGRAM:								
FLYING HOURS	1,031,095	87.26	4,599,905	96.41	9,039,540	95.34	19,170,308	95.76
NO OFM	120,354	10.19	95,419	2.00	354,380	3.74	536,642	2.68
EQUIPMENT (INV)	29,046	2.46	74,635	1.56	86,504	.91	311,081	1.55
SQUADRON MONTHS	0	.0	62	.0	31	.0	0	.0
UNKNOWN	1,118	.09	971	.02	486	.01	933	.0
<u>AVIONICS</u>	3,488,555	72.82	6,483,394	53.85	9,351,664	47.09	22,825,126	51.28
MATERIEL PROGRAM:								
FLYING HOURS	3,442,906	98.69	6,466,448	99.74	9,296,388	99.41	22,656,128	99.26
NO OFM	45,649	1.31	16,456	.25	54,787	.59	168,998	.74
EQUIPMENT (INV)	0	.0	490	.01	344	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	145	.0	0	.0
<u>PROPULSION</u>	120,381	2.51	786,286	6.53	1,025,724	5.17	1,662,699	3.74
MATERIEL PROGRAM:								
FLYING HOURS	108,355	90.01	748,137	95.15	992,450	96.76	1,567,215	94.26
NO OFM	12,026	9.99	38,149	4.85	33,274	3.24	95,484	5.74
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	4,790,549	100.00	12,040,672	100.00	19,858,329	100.00	44,506,789	100.00
MATERIEL PROGRAM:								
FLYING HOURS	4,582,356	95.65	11,814,490	98.12	19,328,378	97.33	43,393,651	97.50
NO OFM	178,029	3.72	150,024	1.25	442,441	2.23	801,124	1.80
EQUIPMENT (INV)	29,046	.61	75,125	.62	86,848	.44	311,081	.70
SQUADRON MONTHS	0	.0	62	.0	31	.0	0	.0
UNKNOWN	1,118	.02	971	.01	631	.0	933	.0

Table A.43
MODEL/DESIGN/SERIES F016A, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	553	99.28	8,282	55.10	38,845	29.73	105,096	26.08
MATERIEL PROGRAM:								
FLYING HOURS	446	80.65	7,942	95.89	38,077	98.02	98,306	93.54
NO OFM	0	.0	0	.0	119	.31	674	.64
EQUIPMENT (INV)	107	19.35	340	4.11	649	1.67	6,116	5.82
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	4	.72	6,749	44.90	91,627	70.13	297,525	73.84
MATERIEL PROGRAM:								
FLYING HOURS	4	100.00	6,749	100.00	90,957	99.27	297,110	99.86
NO OFM	0	.0	0	.0	670	.73	415	.14
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	0	.0	175	.13	308	.08
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	175	100.00	308	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	557	100.00	15,031	100.00	130,647	100.00	402,929	100.00
MATERIEL PROGRAM:								
FLYING HOURS	450	80.79	14,691	97.74	129,209	98.90	395,724	98.21
NO OFM	0	.0	0	.0	789	.60	1,089	.27
EQUIPMENT (INV)	107	19.21	340	2.26	649	.50	6,116	1.52
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

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ESTIMATING USAF AIRCRAFT RECOVERABLE SPARES INVESTMENT.(U)

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Table A.44
MODEL/DESIGN/SERIES F016A, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.45

MODEL/DESIGN/SERIES F016A, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	553	99.28	8,282	55.10	38,845	29.73	105,096	26.08
MATERIEL PROGRAM:								
FLYING HOURS	446	80.65	7,942	95.89	38,077	98.02	98,306	93.54
NO OFH	0	.0	0	.0	119	.31	674	.64
EQUIPMENT (INV)	107	19.35	340	4.11	649	1.67	6,116	5.82
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	4	.72	6,749	44.90	91,627	70.13	297,525	73.84
MATERIEL PROGRAM:								
FLYING HOURS	4	100.00	6,749	100.00	90,957	99.27	297,110	99.86
NO OFH	0	.0	0	.0	670	.73	415	.14
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	0	.0	175	.13	308	.08
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	175	100.00	308	100.00
NO OFH	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	557	100.00	15,031	100.00	130,647	100.00	402,929	100.00
MATERIEL PROGRAM:								
FLYING HOURS	450	80.79	14,691	97.74	129,209	98.90	395,724	98.21
NO OFH	0	.0	0	.0	789	.60	1,089	.27
EQUIPMENT (INV)	107	19.21	340	2.26	649	.50	6,116	1.52
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.46
MODEL/DESIGN/SERIES FO16B, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	0	.0	0	.0	2,936	34.94	39,015	27.32
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	2,915	99.28	38,368	98.34
NO OFH	0	.0	0	.0	9	.31	217	.56
EQUIPMENT (INV)	0	.0	0	.0	12	.41	430	1.10
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	0	.0	0	.0	5,455	64.91	103,679	72.60
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	5,435	99.63	103,679	100.00
NO OFH	0	.0	0	.0	20	.37	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	0	.0	13	.15	112	.08
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	13	100.00	112	100.00
NO OFH	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	0	.0	0	.0	8,404	100.00	142,806	100.00
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	8,363	99.51	142,159	99.55
NO OFH	0	.0	0	.0	29	.35	217	.15
EQUIPMENT (INV)	0	.0	0	.0	12	.14	430	.30
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.47
MODEL/DESIGN/SERIES F016B, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.48
MODEL/DESIGN/SERIES FO16B, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	0	.0	0	.0	2,936	34.94	39,015	27.32
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	2,915	99.28	38,368	98.34
NO OFM	0	.0	0	.0	9	.31	217	.56
EQUIPMENT (INV)	0	.0	0	.0	12	.41	430	1.10
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	0	.0	0	.0	5,455	64.91	103,679	72.60
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	5,435	99.63	103,679	100.00
NO OFM	0	.0	0	.0	20	.37	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	0	.0	13	.15	112	.08
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	13	100.00	112	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	0	.0	0	.0	8,404	100.00	142,806	100.00
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	8,363	99.51	142,159	99.55
NO OFM	0	.0	0	.0	29	.35	217	.15
EQUIPMENT (INV)	0	.0	0	.0	12	.14	430	.30
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.49
MODEL/DESIGN/SERIES F11A, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	90,747,533	54.91	72,612,214	38.67	89,484,829	31.60	95,243,218	30.98
MATERIEL PROGRAM:								
FLYING HOURS	82,907,653	91.36	70,670,164	97.33	85,708,966	95.78	87,812,805	92.20
NO OFM	7,365,276	8.12	1,574,897	2.17	3,619,466	4.04	7,036,816	7.39
EQUIPMENT (INV)	474,224	.52	352,597	.49	150,191	.17	325,655	.34
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	380	.0	14,556	.02	6,206	.01	67,942	.07
<u>AVIONICS</u>	72,944,961	44.14	113,580,333	60.48	191,837,898	67.74	210,340,792	68.41
MATERIEL PROGRAM:								
FLYING HOURS	71,028,874	97.37	112,226,839	98.81	190,077,997	99.08	208,902,568	99.32
NO OFM	1,173,645	1.61	1,225,096	1.08	1,307,707	.68	1,260,699	.60
EQUIPMENT (INV)	738,070	1.01	97,743	.09	150,503	.08	138,398	.07
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	4,372	.01	30,655	.03	301,691	.16	39,127	.02
<u>PROPULSION</u>	1,580,775	.96	1,603,577	.85	1,870,438	.66	1,867,860	.61
MATERIEL PROGRAM:								
FLYING HOURS	1,444,699	91.39	1,343,596	83.79	1,684,902	90.08	1,756,330	94.03
NO OFM	136,076	8.61	259,981	16.21	185,536	9.92	111,530	5.97
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	165,273,269	100.00	187,796,124	100.00	283,193,165	100.00	307,451,870	100.00
MATERIEL PROGRAM:								
FLYING HOURS	155,381,226	94.01	184,240,599	98.11	277,471,865	97.98	298,471,703	97.08
NO OFM	8,674,997	5.25	3,059,974	1.63	5,112,709	1.81	8,409,045	2.74
EQUIPMENT (INV)	1,212,294	.73	450,340	.24	300,694	.11	464,053	.15
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	4,752	.0	45,211	.02	307,897	.11	107,069	.03

Table A.50
MODEL/DESIGN/SERIES FLIIA, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	10,647,647	28.94	20,488,536	46.38	20,030,410	42.41	13,095,017	31.32
MATERIEL PROGRAM:								
FLYING HOURS	9,893,311	92.92	19,963,759	97.44	18,622,638	92.97	10,551,457	80.58
NO OFH	687,197	6.45	438,142	2.14	1,351,301	6.75	2,498,330	19.08
EQUIPMENT (INV)	67,139	.63	73,796	.36	52,289	.26	41,048	.31
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	12,839	.06	4,182	.02	4,182	.03
<u>AVIONICS</u>	26,117,506	70.99	23,685,554	53.62	27,195,619	57.59	28,717,853	68.68
MATERIEL PROGRAM:								
FLYING HOURS	25,299,276	96.87	22,856,693	96.50	26,375,020	96.98	27,947,780	97.32
NO OFH	733,985	2.81	743,667	3.14	696,364	2.56	659,321	2.30
EQUIPMENT (INV)	79,873	.31	75,877	.32	88,401	.33	71,625	.25
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	4,372	.02	9,317	.04	35,834	.13	39,127	.14
<u>PROPULSION</u>	27,755	.08	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	27,755	100.00	0	.0	0	.0	0	.0
NO OFH	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	36,792,908	100.00	44,174,090	100.00	47,226,029	100.00	41,812,870	100.00
MATERIEL PROGRAM:								
FLYING HOURS	35,220,342	95.73	42,820,452	96.94	44,997,658	95.28	38,499,237	92.08
NO OFH	1,421,182	3.86	1,181,809	2.68	2,047,665	4.34	3,157,651	7.55
EQUIPMENT (INV)	147,012	.40	149,673	.34	140,690	.30	112,673	.27
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	4,372	.01	22,156	.05	40,016	.08	43,309	.10

Table A.51

MODEL/DESIGN/SERIES FILLIA, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975	1976	1977	1978
	\$	\$	\$	\$
	%	%	%	%
AIRFRAME	80,099,886	52,123,678	69,454,419	82,148,201
	62.34	36.29	29.43	30.92
MATERIEL PROGRAM:				
FLYING HOURS	73,014,342	50,706,405	67,086,328	77,261,348
NO OFM	6,678,079	1,136,755	2,268,165	4,538,486
EQUIPMENT (INV)	407,085	278,801	97,902	284,607
SQUADRON MONTHS	0	0	0	0
UNKNOWN	380	1,717	2,024	63,760
	.0	.0	.0	.08
AVIONICS	46,827,455	89,894,779	164,642,279	181,622,939
	36.45	62.59	69.77	68.37
MATERIEL PROGRAM:				
FLYING HOURS	45,729,598	89,370,146	163,702,977	180,954,788
NO OFM	439,660	481,429	611,343	601,378
EQUIPMENT (INV)	658,197	21,866	62,102	66,773
SQUADRON MONTHS	0	0	0	0
UNKNOWN	0	21,338	265,857	0
	.0	.02	.16	.0
PROPULSION	1,553,020	1,603,577	1,870,438	1,867,860
	1.21	1.12	.79	.70
MATERIEL PROGRAM:				
FLYING HOURS	1,416,944	1,343,596	1,684,902	1,756,330
NO OFM	136,076	259,981	185,536	111,530
EQUIPMENT (INV)	0	0	0	0
SQUADRON MONTHS	0	0	0	0
UNKNOWN	0	0	0	0
	.0	.0	.0	.0
TOTAL AIRCRAFT	128,480,361	143,622,034	235,967,136	265,639,000
	100.00	100.00	100.00	100.00
MATERIEL PROGRAM:				
FLYING HOURS	120,160,884	141,420,147	232,474,207	259,972,466
NO OFM	7,253,815	1,878,165	3,065,044	5,251,394
EQUIPMENT (INV)	1,065,282	300,667	160,004	351,380
SQUADRON MONTHS	0	0	0	0
UNKNOWN	380	23,055	267,881	63,760
	.0	.02	.11	.02

Table A.52

MODEL/DESIGN/SERIES FILLD, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	128,981,141	48.05	136,328,115	42.31	178,343,961	42.74	177,782,289	41.77
MATERIEL PROGRAM:								
FLYING HOURS	125,242,154	97.10	133,593,966	97.99	174,596,375	97.90	169,486,376	95.33
NO OFM	3,343,363	2.59	2,300,932	1.69	3,482,244	1.95	4,106,945	2.31
EQUIPMENT (INV)	394,949	.31	388,732	.29	221,179	.12	4,126,218	2.32
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	675	.0	44,485	.03	44,163	.02	62,750	.04
<u>AVIONICS</u>	138,248,866	51.50	183,974,954	57.10	236,985,448	56.79	246,021,188	57.80
MATERIEL PROGRAM:								
FLYING HOURS	133,701,146	96.71	179,000,265	97.30	228,629,316	96.47	235,340,047	95.66
NO OFM	3,637,906	2.63	4,552,619	2.47	7,270,062	3.07	9,892,469	3.94
EQUIPMENT (INV)	909,814	.66	397,539	.22	1,046,610	.44	988,672	.40
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	24,531	.01	39,460	.02	0	.0
<u>PROPULSION</u>	1,202,774	.45	1,892,461	.59	1,937,398	.46	1,853,187	.44
MATERIEL PROGRAM:								
FLYING HOURS	1,100,664	91.51	1,590,079	84.02	1,748,081	90.23	1,743,427	94.08
NO OFM	102,110	8.49	302,382	15.98	189,317	9.77	109,760	5.92
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	268,432,781	100.00	322,195,530	100.00	417,266,807	100.00	425,656,664	100.00
MATERIEL PROGRAM:								
FLYING HOURS	260,043,964	96.87	314,184,310	97.51	404,973,772	97.05	406,569,850	95.52
NO OFM	7,083,379	2.64	7,155,933	2.22	10,941,623	2.62	13,909,174	3.27
EQUIPMENT (INV)	1,304,763	.49	786,271	.24	1,267,789	.30	5,114,890	1.20
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	675	.0	69,016	.02	83,623	.02	62,750	.01

Table A.53
MODEL/DESIGN/SERIES FLIID, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	85,655,953	42.58	93,131,805	48.87	128,135,054	59.44	117,080,349	57.25
MATERIEL PROGRAM:								
FLYING HOURS	83,683,613	97.70	92,634,348	99.47	126,833,631	98.98	115,492,548	98.64
NO OFM	1,809,505	2.11	318,936	.34	1,138,516	.89	1,178,953	1.01
EQUIPMENT (INV)	162,445	.19	136,033	.15	120,809	.09	408,848	.35
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	390	.0	42,488	.05	42,098	.03	0	.0
<u>AVIONICS</u>	115,490,017	57.42	97,445,778	51.13	87,439,679	40.56	87,444,283	42.75
MATERIEL PROGRAM:								
FLYING HOURS	111,582,966	96.62	92,765,728	95.20	79,486,467	90.90	77,154,272	88.23
NO OFM	3,528,437	3.06	4,355,851	4.47	7,006,875	8.01	9,411,302	10.76
EQUIPMENT (INV)	378,614	.33	324,199	.33	946,337	1.08	878,709	1.00
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	0	.0	0	.0	0	.0	0	.0
MATERIEL PROGRAM:								
FLYING HOURS	0	.0	0	.0	0	.0	0	.0
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	201,145,970	100.00	190,577,583	100.00	215,574,733	100.00	204,524,632	100.00
MATERIEL PROGRAM:								
FLYING HOURS	195,266,579	97.08	185,400,076	97.28	206,320,098	95.71	192,646,820	94.19
NO OFM	5,337,942	2.65	4,674,787	2.45	8,145,391	3.78	10,590,255	5.18
EQUIPMENT (INV)	541,059	.27	460,232	.24	1,067,146	.50	1,287,557	.63
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	390	.0	42,488	.02	42,098	.02	0	.0

Table A.54

MODEL/DESIGN/SERIES FLIJD, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
AIRFRAME	43,325,188	64.39	43,196,310	32.82	50,208,907	24.89	60,701,940	27.45
MATERIEL PROGRAM:								
FLYING HOURS	41,558,541	95.92	40,959,618	94.82	47,762,744	95.13	53,993,828	88.95
NO OFM	1,533,858	3.54	1,981,996	4.59	2,343,728	4.67	2,927,992	4.82
EQUIPMENT (INV)	232,504	.54	252,699	.59	100,370	.20	3,717,370	6.12
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	285	.0	1,997	.0	2,065	.0	62,750	.10
AVIONICS	22,758,849	33.82	86,529,176	65.74	149,545,769	74.15	158,576,905	71.71
MATERIEL PROGRAM:								
FLYING HOURS	22,118,180	97.18	86,234,537	99.66	149,142,849	99.73	158,185,775	99.75
NO OFM	109,469	.48	196,768	.23	263,187	.18	281,167	.18
EQUIPMENT (INV)	531,200	2.33	73,340	.08	100,273	.07	109,963	.07
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	24,531	.03	39,460	.03	0	.0
PROPULSION	1,202,774	1.79	1,892,461	1.44	1,937,398	.96	1,853,187	.84
MATERIEL PROGRAM:								
FLYING HOURS	1,100,664	91.51	1,590,079	84.02	1,748,081	90.23	1,743,427	94.08
NO OFM	102,110	8.49	302,382	15.98	189,317	9.77	109,760	5.92
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
TOTAL AIRCRAFT	67,286,811	100.00	131,617,947	100.00	201,692,074	100.00	221,132,032	100.00
MATERIEL PROGRAM:								
FLYING HOURS	64,777,385	96.27	128,784,234	97.85	198,653,674	98.49	213,923,030	96.74
NO OFM	1,745,437	2.59	2,481,146	1.89	2,796,232	1.39	3,318,919	1.50
EQUIPMENT (INV)	763,704	1.13	326,039	.25	200,643	.10	3,827,333	1.73
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	285	.0	26,528	.02	41,525	.02	62,750	.03

Table A.55
MODEL/DESIGN/SERIES FILLF, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	67,305,077	64.27	68,064,550	60.75	66,806,733	62.86	67,467,075	64.00
MATERIEL PROGRAM:								
FLYING HOURS	64,940,084	96.49	64,917,410	95.38	63,545,986	95.12	60,717,157	90.00
NO OFM	2,085,799	3.10	2,798,196	4.11	3,155,121	4.72	3,010,162	4.46
EQUIPMENT (INV)	278,817	.41	346,004	.51	103,118	.15	3,677,873	5.45
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	377	.0	2,940	.0	2,505	.0	61,883	.09
<u>AVIONICS</u>	36,033,650	34.41	41,484,606	37.03	37,313,938	35.11	36,238,924	34.38
MATERIEL PROGRAM:								
FLYING HOURS	35,757,690	99.23	41,088,005	99.04	36,911,733	98.92	35,896,091	99.05
NO OFM	97,758	.27	239,316	.58	215,087	.58	231,895	.64
EQUIPMENT (INV)	178,202	.49	121,161	.29	139,243	.37	110,938	.31
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	36,124	.09	47,875	.13	0	.0
<u>PROPULSION</u>	1,381,679	1.32	2,490,505	2.22	2,157,770	2.03	1,703,336	1.62
MATERIEL PROGRAM:								
FLYING HOURS	1,246,863	90.24	2,082,026	83.60	1,960,729	90.87	1,621,856	95.22
NO OFM	134,816	9.76	408,479	16.40	197,041	9.13	81,480	4.78
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	104,720,406	100.00	112,039,661	100.00	106,278,441	100.00	105,409,335	100.00
MATERIEL PROGRAM:								
FLYING HOURS	101,944,637	97.35	108,087,441	96.47	102,418,451	96.37	98,235,104	93.19
NO OFM	2,318,373	2.21	3,445,991	3.08	3,567,249	3.36	3,323,537	3.15
EQUIPMENT (INV)	457,019	.44	467,165	.42	242,361	.23	3,788,811	3.59
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	377	.0	39,064	.03	50,380	.05	61,883	.06

Table A.56
MODEL/DESIGN/SERIES FILLF, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	10,652,168	57.38	10,282,662	56.75	10,144,192	57.93	10,260,577	54.59
MATERIEL PROGRAM:								
FLYING HOURS	10,499,888	98.57	10,130,968	98.52	9,560,867	94.25	9,839,775	95.90
NO OFM	152,280	1.43	151,694	1.48	583,325	5.75	395,801	3.86
EQUIPMENT (INV)	0	.0	0	.0	0	.0	25,001	.24
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	7,853,064	42.31	7,790,332	42.99	7,362,294	42.04	8,531,042	45.39
MATERIEL PROGRAM:								
FLYING HOURS	7,644,734	97.35	7,639,043	98.06	7,192,923	97.70	8,357,057	97.96
NO OFM	30,128	.38	30,128	.39	30,128	.41	63,047	.74
EQUIPMENT (INV)	178,202	2.27	121,161	1.56	139,243	1.89	110,938	1.30
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	57,532	.31	46,649	.26	4,629	.03	4,850	.03
MATERIEL PROGRAM:								
FLYING HOURS	57,532	100.00	46,649	100.00	4,629	100.00	4,850	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	18,562,764	100.00	18,119,643	100.00	17,511,115	100.00	18,796,469	100.00
MATERIEL PROGRAM:								
FLYING HOURS	18,202,154	98.06	17,816,660	98.33	16,758,419	95.70	18,201,682	96.84
NO OFM	182,408	.98	181,822	1.00	613,453	3.50	458,848	2.44
EQUIPMENT (INV)	178,202	.96	121,161	.67	139,243	.80	135,939	.72
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.57

MODEL/DESIGN/SERIES FILLF, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
AIRFRAME	56,652,909	65.75	57,781,888	61.52	56,662,541	63.83	57,206,498	66.05
MATERIEL PROGRAM:								
FLYING HOURS	54,440,196	96.09	54,786,442	94.82	53,985,122	95.27	50,877,382	88.94
NO OFM	1,933,519	3.41	2,646,502	4.58	2,571,796	4.54	2,614,361	4.57
EQUIPMENT (INV)	278,817	.49	346,004	.60	103,118	.18	3,652,872	6.39
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	377	.0	2,940	.01	2,505	.0	61,883	.11
AVIONICS	28,180,586	32.71	33,694,274	35.88	29,951,644	33.74	27,707,882	31.99
MATERIEL PROGRAM:								
FLYING HOURS	28,112,956	99.76	33,448,962	99.27	29,718,810	99.22	27,539,034	99.39
NO OFM	67,630	.24	209,188	.62	184,959	.62	168,848	.61
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	36,124	.11	47,875	.16	0	.0
PROPULSION	1,324,147	1.54	2,443,856	2.60	2,153,141	2.43	1,698,486	1.96
MATERIEL PROGRAM:								
FLYING HOURS	1,189,331	89.82	2,035,377	83.29	1,956,100	90.85	1,617,006	95.20
NO OFM	134,816	10.18	408,479	16.71	197,041	9.15	81,480	4.80
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
TOTAL AIRCRAFT	86,157,642	100.00	93,920,018	100.00	88,767,326	100.00	86,612,866	100.00
MATERIEL PROGRAM:								
FLYING HOURS	83,742,483	97.20	90,270,781	96.11	85,660,032	96.50	80,033,422	92.40
NO OFM	2,135,965	2.48	3,264,169	3.48	2,953,796	3.33	2,864,689	3.31
EQUIPMENT (INV)	278,817	.32	346,004	.37	103,118	.12	3,652,872	4.22
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	377	.0	39,064	.04	50,380	.06	61,883	.07

Table A.58

MODEL/DESIGN/SERIES T037B, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	14,724,068	46.31	14,923,114	46.28	15,604,455	63.28	18,366,813	64.95
MATERIEL PROGRAM:								
FLYING HOURS	14,316,541	97.23	14,390,324	96.43	14,973,500	95.96	17,584,206	95.74
NO OFM	0	.0	10,657	.07	291,070	1.87	24,072	.13
EQUIPMENT (INV)	407,527	2.77	522,133	3.50	339,885	2.18	758,535	4.13
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	16,168,156	50.85	16,481,695	51.11	8,356,329	33.89	9,443,240	33.39
MATERIEL PROGRAM:								
FLYING HOURS	16,168,156	100.00	16,082,944	97.58	7,984,271	95.55	9,443,240	100.00
NO OFM	0	.0	0	.0	31,929	.38	0	.0
EQUIPMENT (INV)	0	.0	398,751	2.42	340,129	4.07	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	905,654	2.85	843,118	2.61	698,994	2.83	468,067	1.66
MATERIEL PROGRAM:								
FLYING HOURS	905,654	100.00	843,118	100.00	698,994	100.00	468,067	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	31,797,878	100.00	32,247,927	100.00	24,659,778	100.00	28,278,120	100.00
MATERIEL PROGRAM:								
FLYING HOURS	31,390,351	98.72	31,316,386	97.11	23,656,765	95.93	27,495,513	97.23
NO OFM	0	.0	10,657	.03	322,999	1.31	24,072	.09
EQUIPMENT (INV)	407,527	1.28	920,884	2.86	680,014	2.76	758,535	2.68
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.59
MODEL/DESIGN/SERIES T037B, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	4,237,892	83.74	1,705,102	62.57	968,948	93.13	1,205,303	93.61
MATERIEL PROGRAM:								
FLYING HOURS	4,237,892	100.00	1,705,102	100.00	959,557	99.03	1,196,901	99.30
NO OFH	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	9,391	.97	8,402	.70
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	80,864	1.60	443,203	16.26	48,493	4.66	75,760	5.88
MATERIEL PROGRAM:								
FLYING HOURS	80,864	100.00	44,452	10.03	48,493	100.00	75,760	100.00
NO OFH	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	398,751	89.97	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	742,211	14.67	576,736	21.16	23,021	2.21	6,451	.50
MATERIEL PROGRAM:								
FLYING HOURS	742,211	100.00	576,736	100.00	23,021	100.00	6,451	100.00
NO OFH	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	5,060,967	100.00	2,725,041	100.00	1,040,462	100.00	1,287,514	100.00
MATERIEL PROGRAM:								
FLYING HOURS	5,060,967	100.00	2,326,290	85.37	1,031,071	99.10	1,279,112	99.35
NO OFH	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	398,751	14.63	9,391	.90	8,402	.65
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.60

MODEL/DESIGN/SERIES T037B, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
AIRFRAME	10,486,176	39.22	13,218,012	44.77	14,635,507	61.96	17,161,510	63.58
MATERIEL PROGRAM:								
FLYING HOURS	10,078,649	96.11	12,685,222	95.97	14,013,943	95.75	16,387,305	95.49
NO OFM	0	.0	10,657	.08	291,070	1.99	24,072	.14
EQUIPMENT (INV)	407,527	3.89	522,133	3.95	330,494	2.26	750,133	4.37
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
AVIONICS	16,087,292	60.17	16,038,492	54.33	8,307,836	35.17	9,367,480	34.71
MATERIEL PROGRAM:								
FLYING HOURS	16,087,292	100.00	16,038,492	100.00	7,935,778	95.52	9,367,480	100.00
NO OFM	0	.0	0	.0	31,929	.38	0	.0
EQUIPMENT (INV)	0	.0	0	.0	340,129	4.09	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
PROPULSION	163,443	.61	266,382	.90	675,973	2.86	461,616	1.71
MATERIEL PROGRAM:								
FLYING HOURS	163,443	100.00	266,382	100.00	675,973	100.00	461,616	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
TOTAL AIRCRAFT	26,736,911	100.00	29,522,886	100.00	23,619,316	100.00	26,990,606	100.00
MATERIEL PROGRAM:								
FLYING HOURS	26,329,384	98.48	28,990,096	98.20	22,625,694	95.79	26,216,401	97.13
NO OFM	0	.0	10,657	.04	322,999	1.37	24,072	.09
EQUIPMENT (INV)	407,527	1.52	522,133	1.77	670,623	2.84	750,133	2.78
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.61

MODEL/DESIGN/SERIES T038A, TOTAL SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	60,425,876	78.67	54,002,748	73.71	54,844,619	79.30	63,864,544	52.37
MATERIEL PROGRAM:								
FLYING HOURS	59,390,459	98.29	52,768,715	97.71	53,028,799	96.69	59,005,309	92.39
NO OFH	810,324	1.34	1,008,425	1.87	1,386,484	2.53	646,731	1.01
EQUIPMENT (INV)	225,093	.37	225,608	.42	429,336	.78	4,212,204	6.60
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	300	.0
<u>AVIONICS</u>	15,796,815	20.57	18,763,684	25.61	13,835,009	20.00	57,796,083	47.40
MATERIEL PROGRAM:								
FLYING HOURS	15,111,923	95.66	15,293,138	81.50	8,868,142	64.10	57,691,387	99.82
NO OFH	61,591	.39	83,266	.44	144,449	1.04	104,696	.18
EQUIPMENT (INV)	623,301	3.95	3,387,280	18.05	4,822,418	34.86	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	584,412	.76	494,377	.67	480,166	.69	284,276	.23
MATERIEL PROGRAM:								
FLYING HOURS	584,412	100.00	494,377	100.00	480,166	100.00	284,276	100.00
NO OFH	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	76,807,103	100.00	73,260,809	100.00	69,159,794	100.00	121,944,903	100.00
MATERIEL PROGRAM:								
FLYING HOURS	75,086,794	97.76	68,556,230	93.58	62,377,107	90.19	116,980,972	95.93
NO OFH	871,915	1.14	1,091,691	1.49	1,530,933	2.21	751,427	.62
EQUIPMENT (INV)	848,394	1.10	3,612,888	4.93	5,251,754	7.59	4,212,204	3.45
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	300	.0

Table A.62
MODEL/DESIGN/SERIES T038A, PECULIAR SPARES INVESTMENT (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	4,367,039	94.42	3,760,042	94.82	3,382,099	93.82	3,827,650	96.40
MATERIEL PROGRAM:								
FLYING HOURS	3,862,494	88.45	3,278,956	87.21	3,216,894	95.12	3,630,951	94.86
NO OFM	504,375	11.55	477,511	12.70	142,291	4.21	100,268	2.62
EQUIPMENT (INV)	170	.0	3,575	.10	22,914	.68	96,431	2.52
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>AVIONICS</u>	133,592	2.89	128,993	3.25	149,797	4.16	92,852	2.34
MATERIEL PROGRAM:								
FLYING HOURS	133,592	100.00	128,993	100.00	110,141	73.53	48,853	52.61
NO OFM	0	.0	0	.0	39,656	26.47	43,999	47.39
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	124,669	2.70	76,517	1.93	73,123	2.03	50,092	1.26
MATERIEL PROGRAM:								
FLYING HOURS	124,669	100.00	76,517	100.00	73,123	100.00	50,092	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	4,625,300	100.00	3,965,552	100.00	3,605,019	100.00	3,970,594	100.00
MATERIEL PROGRAM:								
FLYING HOURS	4,120,755	89.09	3,484,466	87.87	3,400,158	94.32	3,729,896	93.94
NO OFM	504,375	10.90	477,511	12.04	181,947	5.05	144,267	3.63
EQUIPMENT (INV)	170	.0	3,575	.09	22,914	.64	96,431	2.43
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0

Table A.63

MODEL/DESIGN/SERIES T038A, COMMON SPARES INVESTMENT (ALLOCATED) (1978\$),
BY SUBSYSTEM AND MATERIEL PROGRAM

SUBSYSTEM	1975		1976		1977		1978	
	\$	%	\$	%	\$	%	\$	%
<u>AIRFRAME</u>	56,058,837	77.66	50,242,706	72.51	51,462,520	78.50	60,036,894	50.89
MATERIEL PROGRAM:								
FLYING HOURS	55,527,965	99.05	49,489,759	98.50	49,811,905	96.79	55,374,358	92.23
NO OFM	305,949	.55	530,914	1.06	1,244,193	2.42	546,463	.91
EQUIPMENT (INV)	224,923	.40	222,033	.44	406,422	.79	4,115,773	6.86
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	300	.0
<u>AVIONICS</u>	15,663,223	21.70	18,634,691	26.89	13,685,212	20.88	57,703,231	48.91
MATERIEL PROGRAM:								
FLYING HOURS	14,978,331	95.63	15,164,145	81.38	8,758,001	64.00	57,642,534	99.89
NO OFM	61,591	.39	83,266	.45	104,793	.77	60,697	.11
EQUIPMENT (INV)	623,301	3.98	3,387,280	18.18	4,822,418	35.24	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>PROPULSION</u>	459,743	.64	417,860	.60	407,043	.62	234,184	.20
MATERIEL PROGRAM:								
FLYING HOURS	459,743	100.00	417,860	100.00	407,043	100.00	234,184	100.00
NO OFM	0	.0	0	.0	0	.0	0	.0
EQUIPMENT (INV)	0	.0	0	.0	0	.0	0	.0
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	0	.0
<u>TOTAL AIRCRAFT</u>	72,181,803	100.00	69,295,257	100.00	65,554,775	100.00	117,974,309	100.00
MATERIEL PROGRAM:								
FLYING HOURS	70,966,039	98.32	65,071,764	93.91	58,976,949	89.97	113,251,076	96.00
NO OFM	367,540	.51	614,180	.89	1,348,986	2.06	607,160	.51
EQUIPMENT (INV)	848,224	1.18	3,609,313	5.21	5,228,840	7.98	4,115,773	3.49
SQUADRON MONTHS	0	.0	0	.0	0	.0	0	.0
UNKNOWN	0	.0	0	.0	0	.0	300	.0

Appendix B
MULTIPLE REGRESSION ANALYSIS DATA

This appendix contains data for the 16 sample aircraft used in the multiple regression analysis. The data are presented in Tables B.1 through B.16 and are organized by aircraft MDS and subsystem for those spares governed by the flying hour materiel program. Some data elements in the tables are self-explanatory; those requiring definition follow.

Flyaway Cost (Aircraft, Airframe, Avionics, Propulsion). Flyaway cost is the average unit flyaway cost exclusive of research and development and Class V modifications. This cost reflects 3010 appropriation funds for aircraft adjusted to 1978 dollars.

Peak Flying Hours/Sorties/Landings. The peak flying hours/sorties/landings for the MDS is the greatest number of flying hours/sorties/landings recorded during any one fiscal year. It need not be the same fiscal year. In other words the peak flying hour program could have been flown in one fiscal year, the greatest number of sorties in another, and landings in yet another.

Average Number of Aircraft (OA + NOA). The average number of Operating Active (OA) plus Non-Operating Active (NOA) aircraft on hand during the year indicated.

Programmed Flying Hours. The flying hour program for the years 1975, 1976, 1977, and 1978 as reported in PA76-1, 77-1, 78-1, and 79-1, respectively.

Spares Investment. The spares investment, totaled for the aircraft and by major subsystem, is the investment in spares that are managed by the flying hours materiel program. For each subsystem spares investment is broken down as follows:

Peacetime operating stock (POS)

Peculiar--investment in those items with application to only
one MDS

Common--investment in those items with application to more
than one MDS

Item Count (Total, Peculiar, Common). The number of recoverable items with application to the aircraft MDS subsystem indicated that are governed by the flying hours materiel program.

LRU Count. The number of line replaceable units with application to the aircraft MDS subsystem indicated governed by the flying hours materiel program. LRUs have application to an MDS.

SRU Count. The number of shop replaceable units with application to the aircraft MDS subsystem indicated governed by the flying hours materiel program. SRUs have application to an LRU or another SRU.

Weighted Mean OFMTDR. The mean, weighted by the total item count, of the organization field maintenance total demand rates of all those recoverable items for the subsystem indicated whose demands are based on hours flown (i.e., governed by the flying hours materiel program).

Table B.1

MODEL/DESIGN/SERIES, A007D; TOTAL AIRCRAFT PROCURED, 459;
FIRST UNIT PROCURED, 1969; LAST UNIT PROCURED, 1975;
AIRCRAFT FLYAWAY COSTS, \$4,528,786; PEAK FLYING
HOURS/SORTIES/LANDINGS, 109,509/64,685/65,520

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	393.00	400.00	390.00	382.00
ACTUAL FLYING HOURS	95,802	86,401	109,509	101,040
ACTUAL SORTIES	52,733	35,109	64,685	60,876
ACTUAL LANDINGS	53,637	35,498	65,520	61,515
PROGRAMMED FLYING HOURS	98,318	105,431	99,604	97,716
SQUADRONS	15	14	14	15
<u>AIRFRAME</u>				
AIRFRAME FLYAWAY COST (1978\$)	\$3,147,228	\$3,147,228	\$3,147,228	\$3,147,228
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$47,844,494	\$40,024,152	\$46,204,092	\$48,000,004
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$28,315,214	\$22,545,233	\$27,628,975	\$27,418,478
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$19,529,280	\$17,478,919	\$18,575,117	\$20,581,526
TOTAL ITEM COUNT (AIRFRAME)	847	844	939	1,010
PECULIAR ITEM COUNT (AIRFRAME)	595	567	647	626
COMMON ITEM COUNT (AIRFRAME)	252	277	292	384
LRU COUNT (AIRFRAME)	524	508	572	582
SRU COUNT (AIRFRAME)	126	136	148	199
LRU + SRU (AIRFRAME)	650	644	720	781
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0429	.0442	.0454	.0419
<u>AVIONICS</u>				
AVIONICS FLYAWAY COST (1978\$)	\$773,734	\$773,734	\$773,734	\$773,734
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$28,742,907	\$23,554,589	\$26,791,015	\$32,465,757
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$21,599,298	\$12,666,777	\$14,515,397	\$18,187,944
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$7,143,609	\$10,887,812	\$12,275,618	\$14,277,813
TOTAL ITEM COUNT (AVIONICS)	744	709	681	850
PECULIAR ITEM COUNT (AVIONICS)	435	399	369	535
COMMON ITEM COUNT (AVIONICS)	309	310	312	315
LRU COUNT (AVIONICS)	467	411	383	426
SRU COUNT (AVIONICS)	66	140	75	276
LRU + SRU (AVIONICS)	533	551	458	702
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0495	.0362	.0476	.0361
TECHNOLOGY FACTOR	5.58	6.43	7.41	7.80
<u>PROPULSION</u>				
PROPULSION FLYAWAY COST (1978\$)	\$607,824	\$607,824	\$607,824	\$607,824
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$2,922,925	\$2,227,032	\$3,209,988	\$3,307,040
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	\$2,922,925	\$2,227,032	\$3,209,988	\$3,307,040
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	0	0	0	0
TOTAL ITEM COUNT (PROPULSION)	25	22	22	22
PECULIAR ITEM COUNT (PROPULSION)	25	22	22	22
COMMON ITEM COUNT (PROPULSION)	0	0	0	0
LRU COUNT (PROPULSION)	13	12	12	12
SRU COUNT (PROPULSION)	3	2	2	2
LRU + SRU (PROPULSION)	16	14	14	14
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0249	.0268	.0285	.0262
ENGINES PER AIRCRAFT	1	1	1	1
ENGINE TMS	TF41-A-1	TF41-A-1	TF41-A-1	TF41-A-1
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	336	304	441	514

Table B.2

MODEL/DESIGN/SERIES, B052D; TOTAL AIRCRAFT PROCURED, 170;
FIRST UNIT PROCURED, 1955; LAST UNIT PROCURED, 1956;
AIRCRAFT FLYAWAY COST, \$15,373,717; PEAK FLYING
HOURS/SORTIES/LANDINGS, 180,026/27347/28,467

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	127.00	126.00	125.00	106.00
ACTUAL FLYING HOURS	33,789	29,035	33,068	33,156
ACTUAL SORTIES	5,200	3,037	4,232	4,289
ACTUAL LANDINGS	14,018	9,221	12,128	10,820
PROGRAMMED FLYING HOURS	36,114	36,154	29,732	29,700
SQUADRONS	5	5	5	5
<u>AIRFRAME</u>				
AIRFRAME FLYAWAY COST (1978\$)	\$10,878,153	\$10,878,153	\$10,878,153	\$10,878,153
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$128,366,378	\$126,607,159	\$130,119,289	\$128,607,531
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$18,227,082	\$22,837,104	\$22,854,362	\$34,955,652
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$110,139,296	\$103,770,055	\$107,264,927	\$93,651,879
TOTAL ITEM COUNT (AIRFRAME)	2,078	1,970	1,895	1,905
PECULIAR ITEM COUNT (AIRFRAME)	211	223	218	343
COMMON ITEM COUNT (AIRFRAME)	1,867	1,747	1,677	1,562
LRU COUNT (AIRFRAME)	843	828	814	829
SRU COUNT (AIRFRAME)	141	141	118	113
LRU + SRU (AIRFRAME)	984	969	932	942
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0343	.0364	.0383	.0346
<u>AVIONICS</u>				
AVIONICS FLYAWAY COST (1978\$)	\$1,483,503	\$1,483,503	\$1,483,503	\$1,483,503
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$163,908,141	\$172,778,779	\$208,183,396	\$200,031,880
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$11,831,029	\$16,668,009	\$29,061,722	\$20,710,231
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$152,077,112	\$156,110,770	\$179,121,674	\$179,321,649
TOTAL ITEM COUNT (AVIONICS)	1,472	1,587	1,629	1,880
PECULIAR ITEM COUNT (AVIONICS)	108	131	124	293
COMMON ITEM COUNT (AVIONICS)	1,364	1,456	1,505	1,587
LRU COUNT (AVIONICS)	705	700	661	688
SRU COUNT (AVIONICS)	207	335	353	429
LRU + SRU (AVIONICS)	912	1,035	1,014	1,117
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0723	.0742	.0622	.0606
TECHNOLOGY FACTOR	9.86	10.47	10.99	11.94
<u>PROPULSION</u>				
PROPULSION FLYAWAY COST (1978\$)	\$3,012,061	\$3,012,061	\$3,012,061	\$3,012,061
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$9,139,758	\$9,674,539	\$11,129,165	\$10,641,478
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	0	\$2,587	\$1,207,780	\$1,143,597
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$9,139,758	\$9,671,952	\$9,921,385	\$9,497,881
TOTAL ITEM COUNT (PROPULSION)	224	270	272	241
PECULIAR ITEM COUNT (PROPULSION)	0	36	51	21
COMMON ITEM COUNT (PROPULSION)	224	234	221	220
LRU COUNT (PROPULSION)	22	23	25	22
SRU COUNT (PROPULSION)	1	1	1	1
LRU + SRU (PROPULSION)	23	24	26	23
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0284	.0221	.0250	.0220
ENGINES PER AIRCRAFT	8	8	8	8
ENGINE TMS	J57-P-29W	J57-P-29W	J57-P-29W	J57-P-29W
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	2,887	3,185	2,889	2,711

Table B.3

MODEL/DESIGN/SERIES, B052G; TOTAL AIRCRAFT PROCURED, 193;
FIRST UNIT PROCURED, 1957; LAST UNIT PROCURED, 1959;
AIRCRAFT FLYAWAY COST, \$17,989,558; PEAK FLYING
HOURS/SORTIES/LANDINGS, 168,057/18,397/30,019

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	173.00	173.00	173.00	173.00
ACTUAL FLYING HOURS	74,308	79,761	66,345	64,268
ACTUAL SORTIES	10,298	7,186	8,592	8,324
ACTUAL LANDINGS	30,019	20,332	24,565	23,799
PROGRAMMED FLYING HOURS	94,335	79,324	69,056	69,258
SQUADRONS	11	11	10	10
AIRFRAME				
AIRFRAME FLYAWAY COST (1978\$)	\$12,431,270	\$12,431,270	\$12,431,270	\$12,431,270
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$136,267,875	\$141,032,406	\$144,041,414	\$145,458,523
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$37,796,603	\$33,422,465	\$41,905,219	\$46,382,023
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$98,471,272	\$107,609,941	\$102,136,195	\$99,076,500
TOTAL ITEM COUNT (AIRFRAME)	1,840	1,999	1,894	1,900
PECULIAR ITEM COUNT (AIRFRAME)	140	154	139	126
COMMON ITEM COUNT (AIRFRAME)	1,700	1,845	1,755	1,774
LRU COUNT (AIRFRAME)	807	822	800	846
SRU COUNT (AIRFRAME)	125	173	145	150
LRU + SRU (AIRFRAME)	932	995	945	996
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0353	.0312	.0357	.0342
AVIONICS				
AVIONICS FLYAWAY COST (1978\$)	\$2,125,785	\$2,125,785	\$2,125,785	\$2,125,785
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$223,983,795	\$250,339,759	\$288,365,708	\$330,631,034
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$16,118,775	\$16,439,719	\$19,093,117	\$20,660,063
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$207,865,020	\$233,900,040	\$269,272,591	\$309,970,971
TOTAL ITEM COUNT (AVIONICS)	1,755	1,885	3,078	3,242
PECULIAR ITEM COUNT (AVIONICS)	44	44	41	57
COMMON ITEM COUNT (AVIONICS)	1,711	1,841	3,037	3,185
LRU COUNT (AVIONICS)	802	844	1,169	1,217
SRU COUNT (AVIONICS)	339	438	768	878
LRU + SRU (AVIONICS)	1,141	1,282	1,937	2,095
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0610	.0635	.0437	.0489
TECHNOLOGY FACTOR	8.70	9.18	8.06	9.13
PROPULSION				
PROPULSION FLYAWAY COST (1978\$)	\$3,432,503	\$3,432,503	\$3,432,503	\$3,432,503
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$11,507,198	\$13,877,663	\$9,266,408	\$8,682,596
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	\$4,829,359	\$4,548,854	\$6,817,816	\$6,405,553
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$6,677,839	\$9,328,809	\$2,448,592	\$2,277,043
TOTAL ITEM COUNT (PROPULSION)	211	197	187	183
PECULIAR ITEM COUNT (PROPULSION)	20	20	20	20
COMMON ITEM COUNT (PROPULSION)	191	177	167	163
LRU COUNT (PROPULSION)	37	36	32	32
SRU COUNT (PROPULSION)	3	4	4	1
LRU + SRU (PROPULSION)	40	40	36	33
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0271	.0241	.0366	.0321
ENGINES PER AIRCRAFT	8	8	8	8
ENGINE TMS	J57-P-43WB	J57-P-43WB	J57-P-43WB	J57-P-43WB
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	2,719	2,941	3,083	2,984

Table B.4

MODEL/DESIGN/SERIES, B052H; TOTAL AIRCRAFT PROCURED, 102;
FIRST UNIT PROCURED, 1960; LAST UNIT PROCURED, 1961;
AIRCRAFT FLYAWAY COST, \$20,824,642; PEAK FLYING
HOURS/SORTIES/LANDINGS, 49,839/10,306/17,798

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	98.00	97.00	96.00	96.00
ACTUAL FLYING HOURS	42,932	36,280	37,040	36,512
ACTUAL SORTIES	5,715	3,661	4,588	4,567
ACTUAL LANDINGS	17,798	10,505	14,233	14,168
PROGRAMMED FLYING HOURS	51,390	42,224	37,332	37,352
SQUADRONS	6	5	5	5
<u>AIRFRAME</u>				
AIRFRAME FLYAWAY COST (1978\$)	\$13,622,708	\$13,622,708	\$13,622,708	\$13,622,708
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$89,839,090	\$85,580,194	\$89,787,141	\$86,113,417
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$27,546,244	\$26,302,592	\$27,259,759	\$27,061,507
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$62,292,846	\$59,277,602	\$62,527,382	\$59,051,910
TOTAL ITEM COUNT (AIRFRAME)	2,225	2,358	2,240	2,190
PECULIAR ITEM COUNT (AIRFRAME)	506	516	473	431
COMMON ITEM COUNT (AIRFRAME)	1,719	1,842	1,767	1,759
LRU COUNT (AIRFRAME)	918	909	879	913
SRU COUNT (AIRFRAME)	205	226	221	222
LRU + SRU (AIRFRAME)	1,123	1,135	1,100	1,135
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0326	.0317	.0378	.0359
<u>AVIONICS</u>				
AVIONICS FLYAWAY COST (1978\$)	\$3,519,734	\$3,519,734	\$3,519,734	\$3,519,734
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$142,360,970	\$146,077,413	\$177,278,852	\$208,993,110
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$42,054,119	\$46,290,015	\$46,922,722	\$47,874,449
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$100,306,851	\$99,787,398	\$130,356,130	\$161,118,661
TOTAL ITEM COUNT (AVIONICS)	1,642	1,749	2,918	3,037
PECULIAR ITEM COUNT (AVIONICS)	134	136	136	188
COMMON ITEM COUNT (AVIONICS)	1,508	1,613	2,782	2,849
LRU COUNT (AVIONICS)	737	775	1,091	1,119
SRU COUNT (AVIONICS)	266	354	685	776
LRU + SRU (AVIONICS)	1,003	1,129	1,776	1,895
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0564	.0632	.0430	.0501
TECHNOLOGY FACTOR	8.66	9.13	7.93	9.17
<u>PROPULSION</u>				
PROPULSION FLYAWAY COST (1978\$)	\$3,682,200	\$3,682,200	\$3,682,200	\$3,682,200
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$3,217,206	\$4,384,987	\$1,042,756	\$1,141,123
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	\$733	\$46,532	\$86,193	\$196,591
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$3,216,473	\$4,338,455	\$956,563	\$944,532
TOTAL ITEM COUNT (PROPULSION)	176	162	158	147
PECULIAR ITEM COUNT (PROPULSION)	8	8	25	18
COMMON ITEM COUNT (PROPULSION)	168	154	133	129
LRU COUNT (PROPULSION)	28	27	25	24
SRU COUNT (PROPULSION)	3	3	3	1
LRU + SRU (PROPULSION)	31	30	28	25
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0207	.0188	.0202	.0160
ENGINES PER AIRCRAFT	8	8	8	8
ENGINE TYPE	TF33-P-3	TF33-P-3	TF33-P-3	TF33-P-3
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	2,484	2,579	3,122	2,902

Table B.5

MODEL/DESIGN/SERIES, C005A; TOTAL AIRCRAFT PROCURED, 81;
FIRST UNIT PROCURED, 1966; LAST UNIT PROCURED, 1970;
AIRCRAFT FLYAWAY COST, \$66,909,815; PEAK FLYING
HOURS/SORTIES/LANDINGS, 51,058/11,203/33,068

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	77.00	77.00	77.00	77.00
ACTUAL FLYING HOURS	50,522	42,235	49,388	48,281
ACTUAL SORTIES	10,614	6,939	9,664	10,279
ACTUAL LANDINGS	33,068	18,951	28,436	30,642
PROGRAMMED FLYING HOURS	75,236	69,952	41,592	41,288
SQUADRONS	4	4	4	4
AIRFRAME				
AIRFRAME FLYAWAY COST (1978\$)	\$52,119,307	\$52,119,307	\$52,119,307	\$52,119,307
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$176,658,952	\$158,809,779	\$157,164,726	\$167,637,241
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$173,923,330	\$156,017,875	\$153,756,709	\$163,594,224
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$2,735,622	\$2,791,904	\$3,408,017	\$4,043,017
TOTAL ITEM COUNT (AIRFRAME)	6,678	6,543	5,869	5,817
PECULIAR ITEM COUNT (AIRFRAME)	6,542	6,344	5,615	5,593
COMMON ITEM COUNT (AIRFRAME)	136	199	254	224
LRU COUNT (AIRFRAME)	1,929	1,944	1,758	1,726
SRU COUNT (AIRFRAME)	595	530	522	604
LRU + SRU (AIRFRAME)	2,524	2,474	2,280	2,330
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0220	.0263	.0335	.0294
AVIONICS				
AVIONICS FLYAWAY COST (1978\$)	\$11,501,701	\$11,501,701	\$11,501,701	\$11,501,701
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$67,127,990	\$75,065,581	\$68,299,758	\$69,840,971
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$66,483,178	\$74,338,084	\$67,503,298	\$68,828,618
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$644,812	\$727,497	\$796,460	\$1,012,353
TOTAL ITEM COUNT (AVIONICS)	1,142	1,177	1,145	1,196
PECULIAR ITEM COUNT (AVIONICS)	1,024	1,010	997	973
COMMON ITEM COUNT (AVIONICS)	118	167	148	223
LRU COUNT (AVIONICS)	438	460	430	423
SRU COUNT (AVIONICS)	162	132	166	199
LRU + SRU (AVIONICS)	600	592	596	622
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0258	.0327	.0441	.0429
TECHNOLOGY FACTOR	6.14	7.01	8.02	8.86
PROPULSION				
PROPULSION FLYAWAY COST (1978\$)	\$3,288,807	\$3,288,807	\$3,288,807	\$3,288,807
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,547,606	\$1,954,759	\$1,905,689	\$1,133,563
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,547,606	\$1,954,759	\$1,905,689	\$1,133,563
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	0	0	0	0
TOTAL ITEM COUNT (PROPULSION)	126	121	121	102
PECULIAR ITEM COUNT (PROPULSION)	126	121	121	102
COMMON ITEM COUNT (PROPULSION)	0	0	0	0
LRU COUNT (PROPULSION)	19	18	18	17
SRU COUNT (PROPULSION)	11	10	10	1
LRU + SRU (PROPULSION)	30	28	28	18
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0134	.0175	.0145	.0092
ENGINES PER AIRCRAFT	4	4	4	4
ENGINE TMS	TF39-GE-1A	TF39-GE-1A	TF39-GE-1A	TF39-GE-1A
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	1,699	1,520	1,711	2,649

Table B.6

MODEL/DESIGN/SERIES, KC135A; TOTAL AIRCRAFT PROCURED, 732;
FIRST UNIT PROCURED, 1955; LAST UNIT PROCURED, 1964;
AIRCRAFT FLYAWAY COST, \$7,227,700; PEAK FLYING
HOURS/SORTIES/LANDINGS, 375,141/127,555/178,773

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	602.00	601.00	598.00	588.00
ACTUAL FLYING HOURS	206,310	188,709	187,298	192,331
ACTUAL SORTIES	50,613	31,095	40,326	40,979
ACTUAL LANDINGS	138,223	90,174	133,462	135,624
PROGRAMMED FLYING HOURS	236,584	210,278	203,492	204,095
SQUADRONS	38	35	34	34
AIRFRAME				
AIRFRAME FLYAWAY COST (1978\$)	\$5,294,261	\$5,294,261	\$5,294,261	\$5,294,261
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$143,133,247	\$148,531,406	\$176,366,112	\$171,204,873
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$1,984,757	\$2,438,908	\$2,701,623	\$4,132,878
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$139,148,490	\$146,092,498	\$173,664,489	\$167,071,995
TOTAL ITEM COUNT (AIRFRAME)	1,340	1,325	1,396	1,355
PECULIAR ITEM COUNT (AIRFRAME)	43	39	47	45
COMMON ITEM COUNT (AIRFRAME)	1,297	1,286	1,349	1,310
LRU COUNT (AIRFRAME)	678	655	685	691
SRU COUNT (AIRFRAME)	133	140	130	132
LRU + SRU (AIRFRAME)	811	795	815	823
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0441	.0413	.0448	.0441
AVIONICS				
AVIONICS FLYAWAY COST (1978\$)	\$364,884	\$364,884	\$364,884	\$364,884
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$77,403,399	\$88,826,925	\$79,288,720	\$93,944,650
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$4,981,399	\$5,308,187	\$2,284,424	\$3,101,657
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$72,422,000	\$83,518,738	\$77,004,296	\$90,843,993
TOTAL ITEM COUNT (AVIONICS)	2,138	2,250	1,041	1,198
PECULIAR ITEM COUNT (AVIONICS)	246	246	54	57
COMMON ITEM COUNT (AVIONICS)	1,892	2,004	987	1,141
LRU COUNT (AVIONICS)	522	578	411	455
SRU COUNT (AVIONICS)	307	346	236	302
LRU + SRU (AVIONICS)	829	924	647	757
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0386	.0342	.0299	.0423
TECHNOLOGY FACTOR	9.04	9.74	10.29	10.84
PROPULSION				
PROPULSION FLYAWAY COST (1978\$)	\$1,568,555	\$1,568,555	\$1,568,555	\$1,568,555
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$13,725,267	\$16,876,748	\$17,346,105	\$17,197,925
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	\$109,183	\$110,696	\$464,383	\$458,870
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$13,616,084	\$16,766,052	\$16,881,722	\$16,739,055
TOTAL ITEM COUNT (PROPULSION)	130	134	141	139
PECULIAR ITEM COUNT (PROPULSION)	14	14	16	9
COMMON ITEM COUNT (PROPULSION)	116	120	125	130
LRU COUNT (PROPULSION)	31	33	36	36
SRU COUNT (PROPULSION)	8	7	7	3
LRU + SRU (PROPULSION)	39	40	43	41
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0276	.0250	.0337	.0328
ENGINES PER AIRCRAFT	4	4	4	4
ENGINE TMS	J57-P-59W	J57-P-59W	J57-P-59W	J57-P-59W
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	2,340	2,092	2,699	2,814

Table B.7

MODEL/DESIGN/SERIES, C141A; TOTAL AIRCRAFT PROCURED, 284;
FIRST UNIT PROCURED, 1962; LAST UNIT PROCURED, 1967;
AIRCRAFT FLYAWAY COST, \$13,099,324, PEAK FLYING
HOURS/SORTIES/LANDINGS, 669,122/227,178/259,452

MODEL/DESIGN/SERIES		C141A			
TOTAL AIRCRAFT PROCURED		284			
FIRST UNIT PROCURED		1962			
LAST UNIT PROCURED		1967			
AIRCRAFT FLYAWAY COST		\$13,099,324			
PEAK FLYING HOURS/SORTIES/LANDINGS		669,122 / 227,178 / 259,452			
YEAR		1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)		278.00	277.00	275.00	275.00
ACTUAL FLYING HOURS		303,009	298,657	291,074	289,763
ACTUAL SORTIES		81,630	63,532	81,350	83,800
ACTUAL LANDINGS		172,013	127,258	169,488	174,592
PROGRAMMED FLYING HOURS		409,738	339,324	286,156	283,864
SQUADRONS		13	13	13	13
AIRFRAME					
AIRFRAME FLYAWAY COST	(1978\$)	\$9,692,808	\$9,692,808	\$9,692,808	\$9,692,808
TOTAL AIRFRAME SPARES POS INVESTMENT	(1978\$)	\$238,634,279	\$225,538,492	\$222,851,319	\$258,418,875
PECULIAR AIRFRAME SPARES POS INVESTMENT	(1978\$)	\$179,187,879	\$169,053,339	\$169,096,392	\$175,285,811
COMMON AIRFRAME SPARES POS INVESTMENT	(1978\$)	\$59,446,400	\$56,485,153	\$53,754,927	\$83,133,064
TOTAL ITEM COUNT (AIRFRAME)		2,413	2,342	2,219	2,255
PECULIAR ITEM COUNT (AIRFRAME)		1,818	1,707	1,619	1,614
COMMON ITEM COUNT (AIRFRAME)		595	635	600	641
LRU COUNT (AIRFRAME)		1,176	1,105	1,097	1,085
SRU COUNT (AIRFRAME)		362	302	271	309
LRU + SRU (AIRFRAME)		1,538	1,407	1,368	1,394
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)		.0197	.0201	.0224	.0220
AVIONICS					
AVIONICS FLYAWAY COST	(1978\$)	\$1,259,739	\$1,259,739	\$1,259,739	\$1,259,739
TOTAL AVIONICS SPARES POS INVESTMENT	(1978\$)	\$101,459,333	\$97,117,406	\$97,365,769	\$109,000,384
PECULIAR AVIONICS SPARES POS INVESTMENT	(1978\$)	\$36,852,146	\$21,672,200	\$34,227,194	\$33,044,093
COMMON AVIONICS SPARES POS INVESTMENT	(1978\$)	\$64,607,187	\$75,445,206	\$63,138,575	\$75,956,291
TOTAL ITEM COUNT (AVIONICS)		762	838	715	881
PECULIAR ITEM COUNT (AVIONICS)		181	169	119	135
COMMON ITEM COUNT (AVIONICS)		581	669	596	746
LRU COUNT (AVIONICS)		346	358	337	359
SRU COUNT (AVIONICS)		131	166	135	189
LRU + SRU (AVIONICS)		477	524	472	548
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)		.0385	.0421	.0470	.0426
TECHNOLOGY FACTOR		7.45	7.88	8.96	9.72
PROPULSION					
PROPULSION FLYAWAY COST	(1978\$)	\$2,146,777	\$2,146,777	\$2,146,777	\$2,146,777
TOTAL PROPULSION SPARES POS INVESTMENT	(1978\$)	\$8,089,105	\$7,091,781	\$7,327,188	\$6,559,506
PECULIAR PROPULSION SPARES POS INVESTMENT	(1978\$)	\$6,764,831	\$6,050,090	\$6,025,212	\$5,427,951
COMMON PROPULSION SPARES POS INVESTMENT	(1978\$)	\$1,324,274	\$1,041,691	\$1,301,976	\$1,131,555
TOTAL ITEM COUNT (PROPULSION)		128	127	125	111
PECULIAR ITEM COUNT (PROPULSION)		122	121	115	106
COMMON ITEM COUNT (PROPULSION)		6	6	10	7
LRU COUNT (PROPULSION)		36	35	38	34
SRU COUNT (PROPULSION)		3	3	4	1
LRU + SRU (PROPULSION)		39	38	42	35
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)		.0366	.0395	.0352	.0345
ENGINES PER AIRCRAFT		4	4	4	4
ENGINE TMS		TF33-P-7	TF33-P-7	TF33-P-7	TF33-P-7
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL		7,814	8,138	5,679	9,199

Table B.8

MODEL/DESIGN/SERIES, F004C; TOTAL AIRCRAFT PROCURED, 583;
FIRST UNIT PROCURED, 1962; LAST UNIT PROCURED, 1964;
AIRCRAFT FLYAWAY COST, \$3,985,935; PEAK FLYING
HOURS/SORTIES/LANDINGS, 198,327/111,817/143,906

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	295.00	294.00	292.00	288.00
ACTUAL FLYING HOURS	67,280	61,255	59,704	55,439
ACTUAL SORTIES	45,290	32,121	41,961	39,722
ACTUAL LANDINGS	64,620	45,957	58,593	55,467
PROGRAMMED FLYING HOURS	78,343	77,561	65,029	58,802
SQUADRONS	7	7	6	5
AIRFRAME				
AIRFRAME FLYAWAY COST (1978\$)	\$2,917,133	\$2,917,133	\$2,917,133	\$2,917,133
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$63,078,967	\$64,684,835	\$68,668,884	\$56,193,304
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$11,704,638	\$12,456,040	\$11,078,571	\$10,585,623
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$51,374,329	\$52,228,795	\$57,590,313	\$45,607,681
TOTAL ITEM COUNT (AIRFRAME)	615	624	638	633
PECULIAR ITEM COUNT (AIRFRAME)	47	48	44	43
COMMON ITEM COUNT (AIRFRAME)	568	576	594	590
LRU COUNT (AIRFRAME)	397	398	400	398
SRU COUNT (AIRFRAME)	47	50	57	53
LRU + SRU (AIRFRAME)	444	448	457	451
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0682	.0693	.0870	.0884
AVIONICS				
AVIONICS FLYAWAY COST (1978\$)	\$403,051	\$403,051	\$403,051	\$403,051
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$35,663,855	\$36,140,926	\$32,079,563	\$40,557,258
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$17,847,171	\$18,447,862	\$15,476,043	\$23,083,095
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$17,816,684	\$17,693,064	\$16,603,520	\$17,474,163
TOTAL ITEM COUNT (AVIONICS)	667	764	712	733
PECULIAR ITEM COUNT (AVIONICS)	155	158	142	191
COMMON ITEM COUNT (AVIONICS)	512	606	570	542
LRU COUNT (AVIONICS)	276	297	287	296
SRU COUNT (AVIONICS)	142	182	156	162
LRU + SRU (AVIONICS)	418	479	443	458
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.1031	.0894	.0989	.1231
TECHNOLOGY FACTOR	.16	7.79	8.59	9.37
PROPULSION				
PROPULSION FLYAWAY COST (1978\$)	\$665,751	\$665,751	\$665,751	\$665,751
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$966,161	\$984,534	\$1,005,446	\$1,058,769
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	\$53,530	\$54,306	\$53,530	\$67,494
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$912,631	\$930,228	\$951,916	\$991,275
TOTAL ITEM COUNT (PROPULSION)	66	66	64	67
PECULIAR ITEM COUNT (PROPULSION)	1	1	1	1
COMMON ITEM COUNT (PROPULSION)	65	65	63	66
LRU COUNT (PROPULSION)	24	24	23	25
SRU COUNT (PROPULSION)	3	3	3	3
LRU + SRU (PROPULSION)	27	27	26	28
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0206	.0242	.0383	.0374
ENGINES PER AIRCRAFT	2	2	2	2
ENGINE TMS	J79-GE-15	J79-GE-15	J79-GE-15	J79-GE-15
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	1,025	1,065	1,085	1,111

Table B.9

MODEL/DESIGN/SERIES, RF004C; TOTAL AIRCRAFT PROCURED, 505;
FIRST UNIT PROCURED, 1962; LAST UNIT PROCURED, 1972;
AIRCRAFT FLYAWAY COST, \$4,452,347; PEAK FLYING
HOURS/SORTIES/LANDINGS, 118,234/69,832/80,117

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	379.00	376.00	364.00	354.00
ACTUAL FLYING HOURS	98,105	87,802	89,922	87,962
ACTUAL SORTIES	56,607	38,926	54,693	54,418
ACTUAL LANDINGS	76,650	54,852	68,000	67,658
PROGRAMMED FLYING HOURS	92,324	89,948	91,756	89,247
SQUADRONS	12	9	9	9
<u>AIRFRAME</u>				
AIRFRAME FLYAWAY COST (1978\$)	\$3,224,433	\$3,224,433	\$3,224,433	\$3,224,433
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$81,309,168	\$84,364,023	\$95,760,676	\$80,759,745
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$12,522,366	\$13,355,406	\$12,960,619	\$12,776,021
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$68,786,802	\$71,008,617	\$82,800,057	\$67,983,724
TOTAL ITEM COUNT (AIRFRAME)	721	708	710	742
PECULIAR ITEM COUNT (AIRFRAME)	167	151	129	134
COMMON ITEM COUNT (AIRFRAME)	554	557	581	608
LRU COUNT (AIRFRAME)	473	456	446	467
SRU COUNT (AIRFRAME)	86	83	86	93
LRU + SRU (AIRFRAME)	559	539	532	560
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0553	.0596	.0751	.0782
<u>AVIONICS</u>				
AVIONICS FLYAWAY COST (1978\$)	\$699,677	\$699,677	\$699,677	\$699,677
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$140,281,347	\$145,554,642	\$157,149,969	\$148,847,018
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$96,214,878	\$94,704,480	\$104,119,110	\$94,709,027
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$44,066,469	\$50,850,162	\$53,030,859	\$54,137,991
TOTAL ITEM COUNT (AVIONICS)	3,048	2,029	1,905	1,875
PECULIAR ITEM COUNT (AVIONICS)	2,083	1,090	899	1,035
COMMON ITEM COUNT (AVIONICS)	965	939	1,006	840
LRU COUNT (AVIONICS)	895	892	823	794
SRU COUNT (AVIONICS)	676	755	558	641
LRU + SRU (AVIONICS)	1,571	1,647	1,381	1,435
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0256	.0458	.0470	.0608
TECHNOLOGY FACTOR	6.09	8.42	8.50	9.53
<u>PROPULSION</u>				
PROPULSION FLYAWAY COST (1978\$)	\$528,237	\$528,237	\$528,237	\$528,237
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,322,182	\$1,324,952	\$1,440,368	\$1,581,808
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	0	0	0	0
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,322,182	\$1,324,952	\$1,440,368	\$1,581,808
TOTAL ITEM COUNT (PROPULSION)	66	66	65	68
PECULIAR ITEM COUNT (PROPULSION)	0	0	0	0
COMMON ITEM COUNT (PROPULSION)	66	66	65	68
LRU COUNT (PROPULSION)	24	24	23	25
SRU COUNT (PROPULSION)	3	3	3	3
LRU + SRU (PROPULSION)	27	27	26	28
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0206	.0242	.0378	.0368
ENGINES PER AIRCRAFT	2	2	2	2
ENGINE TMS	J79-GE-15	J79-GE-15	J79-GE-15	J79-GE-15
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	1,025	1,065	1,085	1,111

Table B.10

MODEL/DESIGN/SERIES, F004D; TOTAL AIRCRAFT PROCURED, 773;
FIRST UNIT PROCURED, 1964; LAST UNIT PROCURED, 1970;
AIRCRAFT FLYAWAY COST, \$3,265,018; PEAK FLYING
HOURS/SORTIES/LANDINGS, 265,721/159,007/178,146

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	489.00	478.00	473.00	464.00
ACTUAL FLYING HOURS	115,488	108,118	101,370	94,851
ACTUAL SORTIES	75,335	54,847	69,549	70,816
ACTUAL LANDINGS	84,702	62,356	78,395	79,823
PROGRAMMED FLYING HOURS	121,908	138,495	118,512	126,718
SQUADRONS	16	20	19	19
AIRFRAME				
AIRFRAME FLYAWAY COST (1978\$)	\$1,978,856	\$1,978,856	\$1,978,856	\$1,978,856
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$96,435,963	\$101,802,986	\$104,191,985	\$85,263,745
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$2,789,700	\$3,372,848	\$2,291,126	\$2,644,136
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$93,646,263	\$98,430,138	\$101,900,859	\$82,619,609
TOTAL ITEM COUNT (AIRFRAME)	648	673	686	665
PECULIAR ITEM COUNT (AIRFRAME)	57	66	63	49
COMMON ITEM COUNT (AIRFRAME)	591	607	623	616
LRU COUNT (AIRFRAME)	427	437	443	426
SRU COUNT (AIRFRAME)	52	55	59	57
LRU + SRU (AIRFRAME)	479	492	502	483
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0614	.0635	.0808	.0827
AVIONICS				
AVIONICS FLYAWAY COST (1978\$)	\$780,792	\$780,792	\$780,792	\$780,792
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$99,991,866	\$106,401,138	\$102,065,702	\$113,929,440
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$47,023,467	\$54,583,911	\$54,724,287	\$61,912,600
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$52,968,399	\$51,817,227	\$47,341,415	\$52,016,840
TOTAL ITEM COUNT (AVIONICS)	765	800	861	1,096
PECULIAR ITEM COUNT (AVIONICS)	132	140	136	141
COMMON ITEM COUNT (AVIONICS)	633	660	725	955
LRU COUNT (AVIONICS)	417	427	425	611
SRU COUNT (AVIONICS)	136	151	186	252
LRU + SRU (AVIONICS)	553	578	611	863
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0762	.0808	.0876	.1052
TECHNOLOGY FACTOR	7.64	8.62	9.25	9.08
PROPULSION				
PROPULSION FLYAWAY COST (1978\$)	\$505,370	\$505,370	\$505,370	\$505,370
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,552,453	\$1,626,131	\$1,616,235	\$1,695,980
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	0	0	0	0
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,552,453	\$1,626,131	\$1,616,235	\$1,695,980
TOTAL ITEM COUNT (PROPULSION)	64	64	63	66
PECULIAR ITEM COUNT (PROPULSION)	0	0	0	0
COMMON ITEM COUNT (PROPULSION)	64	64	63	66
LRU COUNT (PROPULSION)	23	23	22	24
SRU COUNT (PROPULSION)	3	3	3	3
LRU + SRU (PROPULSION)	26	26	25	27
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0211	.0249	.0389	.0379
ENGINES PER AIRCRAFT	2	2	2	2
ENGINE TMS	J79-GE-15	J79-GE-15	J79-GE-15	J79-GE-15
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	1,025	1,065	1,085	1,111

Table B.11

MODEL/DESIGN/SERIES, F004E; TOTAL AIRCRAFT PROCURED, 812;
FIRST UNIT PROCURED, 1966; LAST UNIT PROCURED, 1974;
AIRCRAFT FLYAWAY COST, \$4,304,246; PEAK FLYING
HOURS/SORTIES/LANDINGS, 215,241/121,359/145,853

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	609.00	675.00	696.00	679.00
ACTUAL FLYING HOURS	147,753	149,018	167,320	157,079
ACTUAL SORTIES	102,559	75,869	121,359	117,933
ACTUAL LANDINGS	137,804	98,825	145,853	141,736
PROGRAMMED FLYING HOURS	174,193	207,619	179,738	156,249
SQUADRONS	22	25	24	23
AIRFRAME				
AIRFRAME FLYAWAY COST (1978\$)	\$2,774,308	\$2,774,808	\$2,774,808	\$2,774,808
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$110,235,318	\$112,477,991	\$141,937,080	\$116,438,501
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$11,336,994	\$10,821,643	\$11,398,069	\$8,249,926
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$98,898,324	\$101,656,348	\$130,539,011	\$108,188,575
TOTAL ITEM COUNT (AIRFRAME)	659	653	641	663
PECULIAR ITEM COUNT (AIRFRAME)	102	100	85	81
COMMON ITEM COUNT (AIRFRAME)	557	553	556	582
LRU COUNT (AIRFRAME)	437	433	418	433
SRU COUNT (AIRFRAME)	55	52	59	67
LRU + SRU (AIRFRAME)	492	485	477	500
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0593	.0628	.0835	.0842
AVIONICS				
AVIONICS FLYAWAY COST (1978\$)	\$877,034	\$877,034	\$877,034	\$877,034
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$95,116,601	\$105,033,726	\$112,439,503	\$130,358,804
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$43,519,535	\$50,845,407	\$61,366,166	\$40,232,748
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$51,597,066	\$54,188,319	\$51,073,337	\$90,126,056
TOTAL ITEM COUNT (AVIONICS)	761	791	975	1,036
PECULIAR ITEM COUNT (AVIONICS)	336	346	331	231
COMMON ITEM COUNT (AVIONICS)	425	445	644	805
LRU COUNT (AVIONICS)	467	473	511	626
SRU COUNT (AVIONICS)	82	171	152	144
LRU + SRU (AVIONICS)	549	644	663	770
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0778	.0734	.0669	.0943
TECHNOLOGY FACTOR	6.22	7.11	6.92	7.85
PROPULSION				
PROPULSION FLYAWAY COST (1978\$)	\$652,404	\$652,404	\$652,404	\$652,404
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,996,316	\$2,257,099	\$2,688,524	\$2,836,536
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	0	0	0	0
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,996,316	\$2,257,099	\$2,688,524	\$2,836,536
TOTAL ITEM COUNT (PROPULSION)	67	67	66	69
PECULIAR ITEM COUNT (PROPULSION)	0	0	0	0
COMMON ITEM COUNT (PROPULSION)	67	67	66	69
LRU COUNT (PROPULSION)	25	25	24	26
SRU COUNT (PROPULSION)	3	3	3	3
LRU + SRU (PROPULSION)	28	28	27	29
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0203	.0239	.0373	.0363
ENGINES PER AIRCRAFT	2	2	2	2
ENGINE TMS	J79-GE-17	J79-GE-17	J79-GE-17	J79-GE-17
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	1,053	1,032	1,085	1,064

Table B.12

MODEL/DESIGN/SERIES, F111A; TOTAL AIRCRAFT PROCURED; 158;
FIRST UNIT PROCURED, 1964; LAST UNIT PROCURED, 1967
AIRCRAFT FLYAWAY COST, \$15,631,582; PEAK FLYING
HOURS/SORTIES/LANDINGS, 35,140/14,208/19,234

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	107.00	102.00	100.00	99.00
ACTUAL FLYING HOURS	23,128	13,201	16,194	15,383
ACTUAL SORTIES	8,684	4,880	6,321	6,570
ACTUAL LANDINGS	12,950	6,912	9,788	10,174
PROGRAMMED FLYING HOURS	27,829	29,349	24,116	23,679
SQUADRONS	3	3	3	3
AIRFRAME				
AIRFRAME FLYAWAY COST (1978\$)	\$8,108,411	\$8,108,411	\$8,108,411	\$8,108,411
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$70,743,401	\$59,476,869	\$66,335,744	\$63,763,616
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$9,709,415	\$19,076,975	\$14,779,905	\$7,441,696
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$61,033,986	\$40,399,894	\$51,555,839	\$56,321,920
TOTAL ITEM COUNT (AIRFRAME)	2,198	2,199	1,934	1,717
PECULIAR ITEM COUNT (AIRFRAME)	360	286	180	120
COMMON ITEM COUNT (AIRFRAME)	1,838	1,913	1,754	1,597
LRU COUNT (AIRFRAME)	1,173	1,148	956	787
SRU COUNT (AIRFRAME)	188	214	205	203
LRU + SRU (AIRFRAME)	1,361	1,362	1,161	990
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0613	.0727	.0895	.0984
AVIONICS				
AVIONICS FLYAWAY COST (1978\$)	\$4,972,442	\$4,972,442	\$4,972,442	\$4,972,442
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$63,502,583	\$70,245,206	\$82,961,707	\$82,231,127
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$24,696,994	\$21,841,059	\$23,599,167	\$24,230,696
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$38,805,589	\$48,404,147	\$59,362,540	\$58,000,431
TOTAL ITEM COUNT (AVIONICS)	1,655	1,648	1,622	1,857
PECULIAR ITEM COUNT (AVIONICS)	328	295	243	303
COMMON ITEM COUNT (AVIONICS)	1,327	1,353	1,379	1,554
LRU COUNT (AVIONICS)	901	876	833	816
SRU COUNT (AVIONICS)	288	314	333	548
LRU + SRU (AVIONICS)	1,189	1,190	1,166	1,364
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0455	.0495	.0635	.0658
TECHNOLOGY FACTOR	6.01	6.69	7.74	8.85
PROPULSION				
PROPULSION FLYAWAY COST (1978\$)	\$2,550,699	\$2,550,699	\$2,550,699	\$2,550,699
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,293,569	\$1,106,532	\$1,459,381	\$1,476,782
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	\$27,755	0	0	0
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,265,814	\$1,106,532	\$1,459,381	\$1,476,782
TOTAL ITEM COUNT (PROPULSION)	96	93	89	88
PECULIAR ITEM COUNT (PROPULSION)	1	0	0	0
COMMON ITEM COUNT (PROPULSION)	95	93	89	88
LRU COUNT (PROPULSION)	44	40	38	37
SRU COUNT (PROPULSION)	4	5	5	5
LRU + SRU (PROPULSION)	48	45	43	42
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0244	.0331	.0311	.0368
ENGINES PER AIRCRAFT	2	2	2	2
ENGINE TMS	TF30-P-3	TF30-P-3	TF30-P-3	TF30-P-3
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	631	518	380	397

Table B.13

MODEL/DESIGN/SERIES, F111D; TOTAL AIRCRAFT PROCURED, 96;
FIRST UNIT PROCURED, 1968; LAST UNIT PROCURED, 1970;
AIRCRAFT FLYAWAY COST, \$23,388,178; PEAK FLYING
HOURS/SORTIES/LANDINGS, 17,355/6,544/9,684

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	93.00	93.00	91.00	90.00
ACTUAL FLYING HOURS	17,355	15,354	16,524	15,139
ACTUAL SORTIES	5,872	4,586	6,544	6,335
ACTUAL LANDINGS	7,922	5,641	9,684	9,375
PROGRAMMED FLYING HOURS	23,800	26,560	23,493	24,140
SQUADRONS	3	3	3	3
<u>AIRFRAME</u>				
AIRFRAME FLYAWAY COST (1978\$)	\$10,546,032	\$10,546,032	\$10,546,032	\$10,546,032
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$113,621,514	\$123,456,799	\$143,313,060	\$134,777,642
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$76,650,955	\$86,552,211	\$102,530,401	\$92,242,501
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$36,964,559	\$36,904,588	\$40,782,659	\$42,535,141
TOTAL ITEM COUNT (AIRFRAME)	3,421	3,524	3,224	3,015
PECULIAR ITEM COUNT (AIRFRAME)	623	648	731	616
COMMON ITEM COUNT (AIRFRAME)	2,798	2,876	2,493	2,399
LRU COUNT (AIRFRAME)	1,245	1,262	1,098	967
SRU COUNT (AIRFRAME)	432	466	471	453
LRU + SRU (AIRFRAME)	1,677	1,728	1,569	1,420
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0805	.0877	.1082	.1042
<u>AVIONICS</u>				
AVIONICS FLYAWAY COST (1978\$)	\$9,384,391	\$9,384,391	\$9,384,391	\$9,384,391
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$121,311,038	\$123,697,109	\$112,463,374	\$105,952,251
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$102,346,017	\$79,007,104	\$65,381,047	\$63,751,358
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$18,965,021	\$44,690,005	\$47,082,327	\$42,200,893
TOTAL ITEM COUNT (AVIONICS)	1,420	1,433	1,446	1,542
PECULIAR ITEM COUNT (AVIONICS)	518	526	492	467
COMMON ITEM COUNT (AVIONICS)	902	907	954	1,075
LRU COUNT (AVIONICS)	598	581	564	531
SRU COUNT (AVIONICS)	330	348	372	482
LRU + SRU (AVIONICS)	928	929	936	1,013
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0918	.0934	.0959	.0971
TECHNOLOGY FACTOR	4.88	5.34	5.48	6.46
<u>PROPULSION</u>				
PROPULSION FLYAWAY COST (1978\$)	\$3,457,755	\$3,457,755	\$3,457,755	\$3,457,755
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$987,260	\$1,314,351	\$1,517,965	\$1,469,002
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	0	0	0	0
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$987,260	\$1,314,351	\$1,517,965	\$1,469,002
TOTAL ITEM COUNT (PROPULSION)	94	91	87	86
PECULIAR ITEM COUNT (PROPULSION)	0	0	0	0
COMMON ITEM COUNT (PROPULSION)	94	91	87	86
LRU COUNT (PROPULSION)	44	40	38	37
SRU COUNT (PROPULSION)	4	5	5	5
LRU + SRU (PROPULSION)	48	45	43	42
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0233	.0319	.0300	.0365
ENGINES PER AIRCRAFT	2	2	2	2
ENGINE TMS	TF30-P-9	TF30-P-9	TF30-P-9	TF30-P-9
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	514	675	473	442

Table B.14

MODEL/DESIGN/SERIES, F111F; TOTAL AIRCRAFT PROCURED, 106;
FIRST UNIT PROCURED, 1970; LAST UNIT PROCURED, 1974;
AIRCRAFT FLYAWAY COST, \$19,893,406, PEAK FLYING
HOURS/SORTIES/LANDINGS, 22,914/8,202/12,621

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	90.00	95.00	99.00	97.00
ACTUAL FLYING HOURS	22,914	22,610	20,048	14,930
ACTUAL SORTIES	8,202	6,382	7,010	6,363
ACTUAL LANDINGS	12,621	9,150	8,238	7,478
PROGRAMMED FLYING HOURS	22,230	29,548	24,707	25,200
SQUADRONS	3	3	4	4
<u>AIRFRAME</u>				
AIRFRAME FLYAWAY COST (1978\$)	\$10,429,108	\$10,429,108	\$10,429,108	\$10,429,108
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$57,882,200	\$58,290,350	\$52,328,188	\$46,155,178
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$8,020,348	\$9,274,739	\$6,726,709	\$6,559,463
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$49,861,852	\$49,015,611	\$45,601,479	\$39,595,715
TOTAL ITEM COUNT (AIRFRAME)	2,881	2,945	2,656	2,557
PECULIAR ITEM COUNT (AIRFRAME)	138	126	98	92
COMMON ITEM COUNT (AIRFRAME)	2,743	2,819	2,558	2,465
LRU COUNT (AIRFRAME)	1,067	1,072	916	804
SRU COUNT (AIRFRAME)	298	326	297	333
LRU + SRU (AIRFRAME)	1,365	1,398	1,213	1,137
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0575	.0640	.0790	.0808
<u>AVIONICS</u>				
AVIONICS FLYAWAY COST (1978\$)	\$6,045,530	\$6,045,530	\$6,045,530	\$6,045,530
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$29,036,560	\$31,160,578	\$29,132,611	\$29,381,702
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$5,091,189	\$4,356,177	\$4,896,670	\$6,866,786
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$23,945,371	\$26,804,401	\$24,235,941	\$22,514,916
TOTAL ITEM COUNT (AVIONICS)	1,116	1,107	1,145	1,210
PECULIAR ITEM COUNT (AVIONICS)	92	90	90	82
COMMON ITEM COUNT (AVIONICS)	1,024	1,017	1,055	1,128
LRU COUNT (AVIONICS)	600	580	567	517
SRU COUNT (AVIONICS)	309	327	363	465
LRU + SRU (AVIONICS)	909	907	930	982
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0545	.0554	.0636	.0717
TECHNOLOGY FACTOR	5.37	6.25	7.23	8.26
<u>PROPULSION</u>				
PROPULSION FLYAWAY COST (1978\$)	\$3,418,768	\$3,418,768	\$3,418,768	\$3,418,768
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,110,361	\$1,689,816	\$1,690,894	\$1,375,467
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	\$57,532	\$46,649	\$4,629	\$4,850
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$1,052,829	\$1,643,167	\$1,686,265	\$1,370,617
TOTAL ITEM COUNT (PROPULSION)	95	92	88	87
PECULIAR ITEM COUNT (PROPULSION)	4	4	2	2
COMMON ITEM COUNT (PROPULSION)	91	88	86	85
LRU COUNT (PROPULSION)	44	40	38	37
SRU COUNT (PROPULSION)	4	5	5	5
LRU + SRU (PROPULSION)	48	45	43	42
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0222	.0300	.0296	.0370
ENGINES PER AIRCRAFT	2	2	2	2
ENGINE TMS	TF30-P-100	TF30-P-100	TF30-P-100	TF30-P-100
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	523	378	403	442

Table B.15

MODEL/DESIGN/SERIES, T037B; TOTAL AIRCRAFT PROCURED; 327;
FIRST UNIT PROCURED, 1959; LAST UNIT PROCURED, 1964;
AIRCRAFT FLYAWAY COST, \$365,044; PEAK FLYING
HOURS/SORTIES/LANDINGS, 507,472/623,309/1,041,965

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	707.00	632.00	581.00	570.00
ACTUAL FLYING HOURS	346,877	282,837	256,582	240,962
ACTUAL SORTIES	277,029	165,434	208,665	190,703
ACTUAL LANDINGS	700,672	435,919	698,137	638,041
PROGRAMMED FLYING HOURS	433,863	326,655	249,389	263,568
SQUADRONS	11	11	11	11
AIRFRAME				
AIRFRAME FLYAWAY COST (1978\$)	\$259,487	\$259,487	\$259,487	\$259,487
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$13,622,663	\$13,743,268	\$14,309,380	\$16,962,217
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$4,237,476	\$1,701,318	\$956,718	\$1,194,063
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$9,385,187	\$12,041,950	\$13,352,662	\$15,768,154
TOTAL ITEM COUNT (AIRFRAME)	237	250	224	230
PECULIAR ITEM COUNT (AIRFRAME)	100	64	59	56
COMMON ITEM COUNT (AIRFRAME)	137	186	165	174
LRU COUNT (AIRFRAME)	162	164	156	159
SRU COUNT (AIRFRAME)	19	21	19	16
LRU + SRU (AIRFRAME)	181	185	175	175
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0589	.0361	.0333	.0354
AVIONICS				
AVIONICS FLYAWAY COST (1978\$)	\$28,313	\$28,313	\$28,313	\$28,313
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$14,450,930	\$14,577,098	\$7,362,184	\$8,728,314
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$80,864	\$44,452	\$48,493	\$75,760
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$14,370,066	\$14,532,646	\$7,313,691	\$8,652,554
TOTAL ITEM COUNT (AVIONICS)	205	208	133	139
PECULIAR ITEM COUNT (AVIONICS)	3	1	1	2
COMMON ITEM COUNT (AVIONICS)	202	207	132	137
LRU COUNT (AVIONICS)	120	129	91	92
SRU COUNT (AVIONICS)	43	46	34	38
LRU + SRU (AVIONICS)	163	175	125	130
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0552	.0579	.0417	.0348
TECHNOLOGY FACTOR	7.43	8.42	7.49	8.74
PROPULSION				
PROPULSION FLYAWAY COST (1978\$)	\$77,244	\$77,244	\$77,244	\$77,244
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$903,586	\$842,680	\$693,843	\$466,902
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	\$742,211	\$576,736	\$23,021	\$6,451
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$161,375	\$265,944	\$670,822	\$460,451
TOTAL ITEM COUNT (PROPULSION)	13	14	16	13
PECULIAR ITEM COUNT (PROPULSION)	5	2	2	1
COMMON ITEM COUNT (PROPULSION)	8	12	14	12
LRU COUNT (PROPULSION)	11	12	13	11
SRU COUNT (PROPULSION)	0	0	0	0
LRU + SRU (PROPULSION)	11	12	13	11
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0718	.0905	.0807	.0606
ENGINES PER AIRCRAFT	2	2	2	2
ENGINE TMS	J69-T-25	J69-T-25	J69-T-25	J69-T-25
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	2,998	3,039	3,093	3,094

Table B.16

MODEL/DESIGN/SERIES, T038A; TOTAL AIRCRAFT PROCURED, 1,101;
FIRST UNIT PROCURED, 1958; LAST UNIT PROCURED, 1970;
AIRCRAFT FLYAWAY COST, \$1,581,374; PEAK FLYING
HOURS/SORTIES/LANDINGS, 602,828/698,752/1,110,838

YEAR	1975	1976	1977	1978
AVERAGE NUMBER OF AIRCRAFT (OA + NOA)	960.00	821.00	835.00	841.00
ACTUAL FLYING HOURS	406,759	332,296	322,376	289,740
ACTUAL SORTIES	349,921	209,274	266,333	237,903
ACTUAL LANDINGS	804,749	518,467	822,491	734,694
PROGRAMMED FLYING HOURS	488,012	379,848	281,030	322,161
SQUADRONS	14	14	14	14
AIRFRAME				
AIRFRAME FLYAWAY COST (1978\$)	\$1,155,790	\$1,155,790	\$1,155,790	\$1,155,790
TOTAL AIRFRAME SPARES POS INVESTMENT (1978\$)	\$57,641,377	\$51,458,326	\$51,533,995	\$57,643,512
PECULIAR AIRFRAME SPARES POS INVESTMENT (1978\$)	\$3,862,494	\$3,278,956	\$3,216,894	\$3,630,951
COMMON AIRFRAME SPARES POS INVESTMENT (1978\$)	\$53,778,883	\$48,179,370	\$48,317,101	\$54,012,561
TOTAL ITEM COUNT (AIRFRAME)	426	436	458	460
PECULIAR ITEM COUNT (AIRFRAME)	138	130	114	114
COMMON ITEM COUNT (AIRFRAME)	288	306	344	346
LRU COUNT (AIRFRAME)	296	295	295	296
SRU COUNT (AIRFRAME)	24	20	32	33
LRU + SRU (AIRFRAME)	320	315	327	329
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0522	.0397	.0374	.0363
AVIONICS				
AVIONICS FLYAWAY COST (1978\$)	\$68,176	\$68,176	\$68,176	\$68,176
TOTAL AVIONICS SPARES POS INVESTMENT (1978\$)	\$13,665,650	\$13,761,131	\$8,067,777	\$54,482,347
PECULIAR AVIONICS SPARES POS INVESTMENT (1978\$)	\$133,592	\$128,993	\$110,141	\$48,853
COMMON AVIONICS SPARES POS INVESTMENT (1978\$)	\$13,532,058	\$13,632,138	\$7,957,636	\$54,433,494
TOTAL ITEM COUNT (AVIONICS)	231	235	113	278
PECULIAR ITEM COUNT (AVIONICS)	7	5	3	3
COMMON ITEM COUNT (AVIONICS)	224	230	110	275
LRU COUNT (AVIONICS)	120	139	81	132
SRU COUNT (AVIONICS)	45	47	27	80
LRU + SRU (AVIONICS)	165	186	108	212
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0456	.0461	.0366	.0649
TECHNOLOGY FACTOR	6.82	7.85	8.31	9.76
PROPULSION				
PROPULSION FLYAWAY COST (1978\$)	\$357,408	\$357,408	\$357,408	\$357,408
TOTAL PROPULSION SPARES POS INVESTMENT (1978\$)	\$584,412	\$494,377	\$480,166	\$284,276
PECULIAR PROPULSION SPARES POS INVESTMENT (1978\$)	\$124,669	\$76,517	\$73,123	\$50,092
COMMON PROPULSION SPARES POS INVESTMENT (1978\$)	\$459,743	\$417,860	\$407,043	\$234,184
TOTAL ITEM COUNT (PROPULSION)	23	24	28	25
PECULIAR ITEM COUNT (PROPULSION)	10	8	8	8
COMMON ITEM COUNT (PROPULSION)	13	16	20	17
LRU COUNT (PROPULSION)	14	15	18	16
SRU COUNT (PROPULSION)	2	2	2	2
LRU + SRU (PROPULSION)	16	17	20	18
WEIGHTED MEAN OFMTDR (PER 100 FLYING HOURS)	.0383	.0357	.0278	.0323
ENGINES PER AIRCRAFT	2	2	2	2
ENGINE TMS	J85-GE-5A	J85-GE-5A	J85-GE-5A	J85-GE-5A
AVERAGE FLYING HOURS BETWEEN ENGINE OVERHAUL	2,081	2,238	2,326	2,344

Appendix C

FLYING HOUR MATERIEL PROGRAM ITEM CONDEMNATIONS, COSTS, AND RATIOS

This appendix is composed of flying hour materiel program condemnations, costs, and ratios for each of 21 aircraft and replacement costs per flying hour for 16 of the sample aircraft. The data are presented in Tables C.1 through C.36.

Tables C.1 through C.21 present the number of condemnations and their replacement costs (1978\$) for the years 1975-1978. These data are summarized by condemnation origin (base, depot, overhaul) and item type (peculiar, common) for each major subsystem. Note the fractional condemnations relative to common item types. Common item condemnations were allocated to specific aircraft MDS in the same way as were common spares. The allocation procedure is described in the text.

Tables C.22 through C.32 record the following condemnation ratios by subsystem and item type.

\$Condem/\$Spares (X 100)--the ratio of the replacement value (1978\$) of the items condemned during the year to the investment value (1978\$) of the spares inventory at the end of that year. For example, in Table C.22, for the A-7D it would have taken an average of 1.81 cents for every 1978 dollar of investment in airframe item spares to replace those items condemned during 1975.

#Condem/#Spares (X 100)--the ratio of the number of items condemned during the year to the number of inventoried items at the end of that year. For example, in Table C.22, for the A-7D airframe, 3.26 peculiar items were condemned during 1975 for every 100 peculiar items in the spares inventory.

Tables C.33 through C.36 show the replacement costs per flying hour. It is the ratio of the replacement value (1978\$) of the items condemned during the year to the number of hours flown during that year.

Table C.1

MODEL/DESIGN/SERIES A007D, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

AIRCRAFT	1975		1976		1977		1978	
	\$	n	\$	n	\$	n	\$	n
TOTAL	1,191,599	712.8	775,320	419.5	1,455,538	590.8	2,202,996	1,318.7
PECULIAR	1,103,832	536.0	665,400	277.0	1,380,337	823.0	2,152,548	1,220.0
COMMON	87,767	176.8	110,920	74.5	65,201	167.8	50,448	98.7
BASE	63,664	102.0	23,184	33.3	94,720	65.0	169,893	160.9
PECULIAR	57,877	83.6	23,940	31.0	91,877	60.0	167,353	156.0
COMMON	5,787	19.0	1,244	2.3	843	5.0	2,540	4.9
DEPOT	578,659	298.2	688,300	195.4	726,019	393.6	962,265	381.5
PECULIAR	535,812	233.0	610,621	173.0	684,134	291.0	936,805	333.0
COMMON	42,847	79.2	77,679	72.4	41,685	102.6	25,460	48.5
OVERHAUL	549,278	312.5	661,839	190.8	624,800	532.2	1,070,840	776.3
PECULIAR	510,144	234.0	629,843	123.0	602,126	472.0	1,048,391	731.0
COMMON	39,134	78.5	31,998	67.8	22,674	60.2	22,449	45.3
AVIONICS								
TOTAL	184,364	84.9	169,584	81.4	108,682	76.0	148,877	55.3
PECULIAR	143,698	43.0	11,810	26.0	23,429	14.0	28,624	20.0
COMMON	40,666	9.9	108,774	57.4	86,253	62.0	120,253	35.3
BASE	41,128	17.4	9,942	7.3	20,633	27.6	16,576	5.3
PECULIAR	25,833	6.0	6,331	3.0	6,734	3.0	1,052	1.0
COMMON	15,295	11.4	3,611	4.3	13,899	24.6	15,524	4.3
DEPOT	64,749	33.1	43,279	24.8	37,729	20.0	48,013	20.1
PECULIAR	57,311	16.0	0	0	3,190	2.0	9,687	6.0
COMMON	14,738	17.1	43,279	24.8	34,539	18.0	38,326	14.1
OVERHAUL	78,289	34.4	117,306	31.3	60,326	28.4	84,288	30.0
PECULIAR	67,355	23.0	43,479	23.0	17,307	9.0	17,886	13.0
COMMON	10,934	11.4	63,827	28.3	43,019	19.4	66,402	17.0
PROPULSION								
TOTAL	5,978	24.0	5,861	24.0	5,627	15.0	18,364	32.0
PECULIAR	5,978	24.0	5,861	24.0	5,627	15.0	18,364	32.0
COMMON	0	0	0	0	0	0	0	0
BASE	240	1.0	0	0	0	0	0	0
PECULIAR	240	1.0	0	0	0	0	0	0
COMMON	0	0	0	0	0	0	0	0
DEPOT	4,900	20.0	5,557	23.0	3,884	11.0	12,974	25.0
PECULIAR	4,900	20.0	5,557	23.0	3,884	11.0	12,974	25.0
COMMON	0	0	0	0	0	0	0	0
OVERHAUL	841	3.0	105	1.0	1,144	4.0	5,391	7.0
PECULIAR	841	3.0	105	1.0	1,144	4.0	5,391	7.0
COMMON	0	0	0	0	0	0	0	0
MDS TOTAL								
TOTAL	1,381,941	821.7	941,765	526.9	1,559,247	1,081.9	2,370,247	1,406.1
PECULIAR	1,253,507	605.0	722,070	327.0	1,407,792	852.0	2,199,535	1,272.0
COMMON	128,433	216.7	219,694	199.9	151,454	229.9	170,701	134.1
BASE	105,232	120.4	35,126	46.6	115,350	92.6	186,469	166.2
PECULIAR	83,949	90.0	30,471	34.0	100,611	63.0	168,405	137.0
COMMON	21,282	30.4	4,655	6.6	14,739	29.6	18,064	9.2
DEPOT	648,308	351.3	437,136	243.3	767,632	424.7	1,023,252	426.6
PECULIAR	591,222	255.0	316,177	146.0	691,407	304.0	959,665	364.0
COMMON	57,085	96.3	120,957	97.3	76,224	120.7	63,586	62.6
OVERHAUL	628,408	349.9	469,510	243.0	676,270	564.6	1,160,519	813.3
PECULIAR	578,339	260.0	375,224	147.0	615,776	485.0	1,071,667	751.0
COMMON	50,068	89.9	94,285	96.0	60,493	79.6	88,851	62.3

Table C.2

MODEL/DESIGN/SERIES A010A, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	325	1.3	2,259	12.9	12,703	74.3	63,913	219.2
PECULIAR	0	.0	0	.0	0	.0	18,324	11.0
COMMON	325	1.3	2,259	12.9	12,703	74.3	45,589	208.2
BASE	17	.1	25	.1	226	1.2	2,536	8.0
PECULIAR	0	.0	0	.0	0	.0	1,236	2.0
COMMON	17	.1	25	.1	226	1.2	1,300	6.0
DEPOT	19	.0	1,021	6.0	5,953	35.5	28,339	95.6
PECULIAR	0	.0	0	.0	0	.0	6,884	3.0
COMMON	19	.0	1,021	6.0	5,953	35.5	21,455	92.6
OVERHAUL	291	1.2	1,214	6.8	6,527	37.6	33,041	115.5
PECULIAR	0	.0	0	.0	0	.0	10,205	6.0
COMMON	291	1.2	1,214	6.8	6,527	37.6	22,836	109.5
AVIONICS								
TOTAL	17	.0	592	.4	14,882	13.2	36,040	19.7
PECULIAR	0	.0	0	.0	0	.0	14,936	2.0
COMMON	17	.0	592	.4	14,882	13.2	21,104	17.7
BASE	0	.0	13	.0	144	.2	15,076	2.3
PECULIAR	0	.0	0	.0	0	.0	14,936	2.0
COMMON	0	.0	13	.0	144	.2	140	.3
DEPOT	9	.0	163	.1	7,829	9.0	10,542	8.8
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	9	.0	163	.1	7,829	9.0	10,542	8.8
OVERHAUL	9	.0	419	.2	6,912	3.9	10,424	8.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	9	.0	419	.2	6,912	3.9	10,424	8.0
PROPULSION								
TOTAL	0	.0	0	.0	0	.0	48,061	16.0
PECULIAR	0	.0	0	.0	0	.0	48,061	16.0
COMMON	0	.0	0	.0	0	.0	0	.0
BASE	0	.0	0	.0	0	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	0	.0
DEPOT	0	.0	0	.0	0	.0	45,633	15.0
PECULIAR	0	.0	0	.0	0	.0	45,633	15.0
COMMON	0	.0	0	.0	0	.0	0	.0
OVERHAUL	0	.0	0	.0	0	.0	2,430	1.0
PECULIAR	0	.0	0	.0	0	.0	2,430	1.0
COMMON	0	.0	0	.0	0	.0	0	.0
MDS TOTAL								
TOTAL	342	1.3	2,851	13.3	27,585	87.4	148,014	254.9
PECULIAR	0	.0	0	.0	0	.0	81,320	29.0
COMMON	342	1.3	2,851	13.3	27,585	87.4	66,693	225.9
BASE	17	.1	38	.1	370	1.5	17,612	10.4
PECULIAR	0	.0	0	.0	0	.0	16,172	4.0
COMMON	17	.1	38	.1	370	1.5	1,440	6.4
DEPOT	28	.0	1,184	6.1	13,782	44.5	84,514	119.4
PECULIAR	0	.0	0	.0	0	.0	52,516	18.0
COMMON	28	.0	1,184	6.1	13,782	44.5	31,996	101.4
OVERHAUL	300	1.2	1,633	7.1	13,439	41.5	45,895	125.1
PECULIAR	0	.0	0	.0	0	.0	12,634	7.0
COMMON	300	1.2	1,633	7.1	13,439	41.5	33,259	118.1

Table C.3

MODEL/DESIGN/SERIES B052D, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	11,018,230	2,898.3	5,887,526	3,018.2	6,824,054	3,288.7	4,759,765	2,604.7
PECULIAR	1,284,221	131.0	953,369	115.0	908,569	115.0	1,421,875	316.0
COMMON	9,734,009	2,707.3	4,934,157	2,903.2	5,915,485	3,173.7	3,337,890	2,288.7
BASE	351,248	237.3	1,003,428	390.0	1,381,603	578.3	129,970	216.7
PECULIAR	2,659	6.0	0	0	14,447	21.0	11,483	20.0
COMMON	348,589	231.3	1,003,428	390.0	1,367,156	557.3	118,487	196.7
DEPOT	7,837,189	1,251.3	2,811,790	1,230.1	3,080,891	1,457.3	2,355,454	1,211.3
PECULIAR	623,313	88.0	551,435	41.0	644,638	56.0	742,991	177.0
COMMON	7,213,876	1,163.3	2,260,355	1,189.1	2,436,253	1,401.3	1,612,463	1,034.3
OVERHAUL	2,829,801	1,409.6	2,072,304	1,398.1	2,361,556	1,253.0	2,274,155	1,176.6
PECULIAR	658,250	97.0	401,934	74.0	249,484	38.0	66,403	119.0
COMMON	2,171,551	1,312.6	1,670,370	1,324.1	2,112,072	1,215.0	1,606,952	1,057.6
AVIONICS								
TOTAL	7,770,759	2,014.4	4,180,020	1,460.7	14,152,860	1,889.8	3,092,998	1,602.0
PECULIAR	751,966	110.0	186,989	47.0	110,892	215.0	33,584	97.0
COMMON	7,018,793	1,904.4	3,993,031	1,413.7	14,041,968	1,674.8	3,059,414	1,505.0
BASE	197,784	36.5	74,875	49.2	89,712	89.0	53,706	61.9
PECULIAR	0	0	6,237	3.0	15,566	46.0	4,655	1.0
COMMON	197,784	36.5	68,638	46.2	74,146	43.0	49,051	60.9
DEPOT	3,618,466	964.0	1,097,732	535.0	5,555,227	923.1	1,119,352	628.2
PECULIAR	390,897	52.0	27,866	12.0	47,512	84.0	14,163	47.0
COMMON	3,227,569	912.0	1,069,866	523.0	5,507,715	839.1	1,105,189	581.2
OVERHAUL	3,954,529	1,013.9	3,007,416	876.5	8,507,923	877.7	1,919,943	911.8
PECULIAR	361,069	58.0	152,887	32.0	47,814	85.0	14,766	49.0
COMMON	3,593,460	955.9	2,854,529	844.5	8,460,109	792.7	1,905,177	862.8
PROPULSION								
TOTAL	344,042	303.7	353,425	292.3	310,089	173.2	396,663	185.7
PECULIAR	0	0	0	0	0	0	4,343	5.0
COMMON	344,042	303.7	353,425	292.3	310,089	173.2	392,320	180.7
BASE	10,228	22.1	9,610	21.7	9,329	18.2	6,405	18.7
PECULIAR	0	0	0	0	0	0	460	1.0
COMMON	10,228	22.1	9,610	21.7	9,329	18.2	5,945	17.7
DEPOT	168,471	139.2	140,390	129.6	157,309	82.0	204,812	83.9
PECULIAR	0	0	0	0	0	0	1,942	2.0
COMMON	168,471	139.2	140,390	129.6	157,309	82.0	202,870	81.9
OVERHAUL	165,346	142.5	203,429	141.1	143,454	73.0	185,448	83.2
PECULIAR	0	0	0	0	0	0	1,942	2.0
COMMON	165,346	142.5	203,429	141.1	143,454	73.0	183,506	81.2
MDS TOTAL								
TOTAL	19,133,031	5,216.4	10,420,971	4,771.1	21,287,003	5,351.7	8,249,426	4,392.4
PECULIAR	2,036,187	301.0	1,140,358	162.0	1,019,461	330.0	1,459,802	418.0
COMMON	17,096,843	4,915.4	9,280,612	4,609.1	20,267,541	5,021.7	6,789,624	3,974.4
BASE	559,260	295.9	1,087,913	460.8	1,480,644	685.5	190,081	297.3
PECULIAR	2,659	6.0	6,237	3.0	30,013	67.0	16,598	22.0
COMMON	556,599	289.9	1,081,674	457.8	1,450,630	618.5	173,483	275.3
DEPOT	11,624,126	2,354.5	4,049,912	1,894.7	8,793,427	2,462.5	3,679,618	1,923.5
PECULIAR	1,014,210	140.0	579,301	53.0	692,150	140.0	759,096	226.0
COMMON	10,609,915	2,214.5	3,470,610	1,841.7	8,101,276	2,322.5	2,920,522	1,697.5
OVERHAUL	6,949,676	2,566.0	5,283,149	2,415.6	11,012,933	2,203.7	4,379,746	2,171.6
PECULIAR	1,019,319	155.0	554,821	106.0	297,298	123.0	684,111	170.0
COMMON	5,930,356	2,411.0	4,728,327	2,309.6	10,715,634	2,080.7	3,695,635	2,001.6

Table C.4

MODEL/DESIGN/SERIES B052G, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	16,052,809	4,203.2	7,058,787	4,067.6	14,693,567	4,021.1	8,348,974	3,768.3
PECULIAR	6,954,314	466.0	1,660,791	199.0	9,449,950	258.0	2,040,531	150.0
COMMON	9,098,495	3,737.2	5,397,996	3,868.6	5,243,617	3,763.1	6,308,443	3,618.3
BASE	464,700	400.6	422,905	308.3	260,189	230.9	245,347	248.8
PECULIAR	82,815	50.0	62,002	12.0	59,187	2.0	83,337	13.0
COMMON	381,885	350.6	360,903	296.3	201,002	228.9	162,010	235.8
DEPOT	9,327,244	1,666.7	3,011,751	1,793.7	7,315,908	1,941.0	4,094,702	1,736.1
PECULIAR	3,465,625	236.0	781,995	88.0	4,684,491	127.0	1,048,168	79.0
COMMON	5,861,619	1,430.7	2,229,756	1,705.7	2,631,417	1,814.0	3,046,534	1,657.1
OVERHAUL	6,260,872	2,136.0	3,624,129	1,965.5	7,117,458	1,849.1	4,008,918	1,783.4
PECULIAR	3,405,875	180.0	816,795	99.0	4,706,273	129.0	909,027	58.0
COMMON	2,854,997	1,956.0	2,807,334	1,866.5	2,411,185	1,720.1	3,099,891	1,725.4
AVIONICS								
TOTAL	3,842,121	2,155.2	4,159,656	2,449.4	7,634,744	3,704.5	7,537,188	3,715.4
PECULIAR	60,495	14.0	50,092	13.0	12,274	4.0	11,164	6.0
COMMON	3,781,626	2,141.2	4,109,564	2,436.4	7,622,470	3,700.5	7,526,024	3,709.4
BASE	153,089	82.2	242,555	210.7	93,613	67.2	150,947	138.3
PECULIAR	14,225	4.0	3,900	3.0	3,776	1.0	1,488	2.0
COMMON	138,864	78.2	238,659	207.7	89,837	66.2	149,459	136.3
DEPOT	1,910,665	1,109.8	1,753,393	1,073.0	3,612,917	1,882.4	2,497,741	1,419.4
PECULIAR	33,897	8.0	25,165	8.0	8,498	3.0	9,677	4.0
COMMON	1,876,768	1,101.8	1,728,228	1,065.0	3,604,419	1,879.4	2,488,064	1,415.4
OVERHAUL	1,778,376	963.2	2,163,711	1,165.7	3,928,215	1,754.9	4,888,508	2,157.7
PECULIAR	12,373	2.0	21,028	2.0	0	0.0	0	0.0
COMMON	1,766,003	961.2	2,142,683	1,163.7	3,928,215	1,754.9	4,888,508	2,157.7
PROPULSION								
TOTAL	546,289	574.3	496,434	496.9	273,901	290.8	370,220	296.0
PECULIAR	192,469	195.0	133,740	136.0	107,423	86.0	117,137	73.0
COMMON	353,820	379.3	362,694	360.9	166,478	204.8	253,083	223.0
BASE	10,036	6.8	16,703	14.2	27,475	47.6	15,477	4.1
PECULIAR	1,271	1.0	2,541	2.0	1,271	1.0	13,662	1.0
COMMON	8,765	5.8	14,162	12.2	26,204	46.6	1,815	3.1
DEPOT	274,045	287.5	242,765	241.3	121,251	119.9	178,045	144.3
PECULIAR	101,500	102.0	69,847	70.0	52,442	42.0	52,226	35.0
COMMON	172,545	185.5	172,918	171.3	68,809	77.9	125,819	109.3
OVERHAUL	262,210	280.0	236,968	241.4	125,179	123.3	176,701	147.6
PECULIAR	89,699	92.0	61,354	64.0	53,712	43.0	51,250	37.0
COMMON	172,511	188.0	175,614	177.4	71,467	80.3	125,451	110.6
MDS TOTAL								
TOTAL	20,441,219	6,932.7	11,714,877	7,013.9	22,602,212	8,016.3	16,256,382	7,779.7
PECULIAR	7,207,278	675.0	1,844,623	348.0	9,569,647	348.0	2,168,832	229.0
COMMON	13,233,941	6,257.7	9,870,254	6,665.9	13,032,565	7,668.3	14,087,550	7,550.7
BASE	627,825	489.6	682,167	533.2	381,277	345.7	411,771	391.2
PECULIAR	98,311	55.0	68,443	17.0	64,234	4.0	98,487	16.0
COMMON	529,514	434.6	613,724	516.2	317,043	341.7	313,284	375.2
DEPOT	11,511,954	3,064.0	5,007,909	3,108.1	11,050,076	3,943.4	6,770,488	3,299.8
PECULIAR	3,601,022	346.0	877,007	166.0	4,745,431	172.0	1,110,071	118.0
COMMON	7,910,932	2,718.0	4,130,902	2,942.1	6,304,645	3,771.4	5,660,417	3,181.8
OVERHAUL	8,301,458	3,379.1	6,024,808	3,372.6	11,170,852	3,727.3	9,074,127	4,088.6
PECULIAR	3,507,947	274.0	899,177	165.0	4,759,985	172.0	960,277	95.0
COMMON	4,793,511	3,105.1	5,125,631	3,207.6	6,410,866	3,555.3	8,113,849	3,993.6

Table C.5

MODEL/DESIGN/SERIES B052H, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	8,030,512	2,771.1	6,423,093	2,506.6	4,178,623	2,529.0	4,316,307	2,326.6
PECULIAR	650,410	468.0	510,982	135.0	615,082	286.0	670,125	248.0
COMMON	7,380,102	2,303.1	5,912,111	2,171.6	3,563,541	2,243.0	3,646,182	2,078.6
BASE	278,783	322.6	247,111	274.2	149,117	179.1	145,088	152.5
PECULIAR	62,008	123.0	60,292	129.0	34,311	44.0	52,087	14.0
COMMON	216,775	199.6	186,819	145.2	114,806	135.1	93,001	138.5
DEPOT	4,743,909	1,098.8	2,968,841	1,096.8	2,227,421	1,235.8	2,064,183	1,083.4
PECULIAR	281,357	194.0	192,145	104.0	324,786	139.0	299,843	139.0
COMMON	4,462,552	904.8	2,776,696	992.8	1,902,635	1,096.8	1,764,340	944.4
OVERHAUL	3,007,826	1,349.6	3,207,132	1,135.6	1,802,087	1,114.1	2,107,023	1,090.7
PECULIAR	307,045	151.0	258,546	102.0	255,986	103.0	318,196	95.0
COMMON	2,700,781	1,198.6	2,948,586	1,033.6	1,546,101	1,011.1	1,788,827	995.7
AVIONICS								
TOTAL	2,668,932	958.5	2,390,286	1,023.7	4,080,543	1,862.5	3,711,407	1,817.5
PECULIAR	981,310	84.0	545,320	25.0	205,092	48.0	265,405	12.0
COMMON	1,687,622	874.5	1,844,966	998.7	3,875,451	1,814.5	3,446,002	1,805.5
BASE	103,505	42.5	140,483	92.0	95,366	28.1	121,506	72.5
PECULIAR	40,545	2.0	33,939	3.0	58,907	1.0	43,263	2.0
COMMON	62,960	40.5	106,544	89.0	36,459	27.1	78,243	70.5
DEPOT	1,372,907	506.2	907,497	435.4	1,885,440	932.3	1,176,432	670.6
PECULIAR	492,215	50.0	114,378	6.0	94,943	43.0	70,829	4.0
COMMON	880,692	458.2	793,139	429.4	1,790,497	889.3	1,105,603	666.6
OVERHAUL	1,192,528	407.8	1,342,315	496.4	2,099,752	902.1	2,413,472	1,074.4
PECULIAR	448,551	32.0	397,023	16.0	51,243	4.0	151,314	6.0
COMMON	743,977	375.8	945,292	480.4	2,048,509	898.1	2,262,158	1,068.4
PROPULSION								
TOTAL	108,497	110.6	72,543	87.4	32,541	43.5	61,115	70.7
PECULIAR	0	.0	0	.0	7,269	9.0	31,498	39.0
COMMON	108,497	110.6	72,543	87.4	25,272	34.5	29,617	31.7
BASE	4,440	2.7	1,757	3.3	938	.5	2,424	3.0
PECULIAR	0	.0	0	.0	0	.0	2,424	3.0
COMMON	4,440	2.7	1,757	3.3	938	.5	0	.0
DEPOT	51,402	52.9	33,107	38.0	19,545	26.1	44,319	52.6
PECULIAR	0	.0	0	.0	7,269	9.0	29,076	36.0
COMMON	51,402	52.9	33,107	38.0	12,276	17.1	15,243	16.6
OVERHAUL	52,658	54.9	37,681	46.1	12,062	16.8	14,375	15.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	52,658	54.9	37,681	46.1	12,062	16.8	14,375	15.1
MDS TOTAL								
TOTAL	10,807,941	3,840.2	8,885,922	3,617.7	8,291,707	4,435.0	8,088,829	4,214.9
PECULIAR	1,631,720	552.0	1,056,302	360.0	827,443	343.0	967,028	299.0
COMMON	9,176,220	3,288.2	7,829,619	3,257.7	7,464,264	4,092.0	7,121,801	3,915.9
BASE	386,728	367.9	389,351	369.5	245,421	207.8	269,018	228.0
PECULIAR	102,553	125.0	94,231	132.0	93,218	45.0	97,773	19.0
COMMON	284,174	242.9	295,119	237.5	152,202	162.8	171,244	209.0
DEPOT	6,168,218	1,659.9	3,909,445	1,570.1	4,132,406	2,194.2	3,284,934	1,806.6
PECULIAR	773,572	244.0	306,503	110.0	426,998	191.0	399,748	179.0
COMMON	5,394,645	1,415.9	3,602,941	1,460.1	3,705,408	2,003.2	2,885,186	1,627.6
OVERHAUL	4,253,012	1,812.4	4,587,128	1,678.1	3,913,901	2,032.9	4,534,870	2,180.2
PECULIAR	755,596	183.0	655,569	118.0	307,229	107.0	469,510	101.0
COMMON	3,497,415	1,629.4	3,931,558	1,560.1	3,606,671	1,925.9	4,065,359	2,079.2

Table C.6

MODEL/DESIGN/SERIES C005A, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	7,088,933	3,459.1	4,224,626	5,493.2	7,606,142	5,420.9	8,755,213	5,359.8
PECULIAR	7,005,385	3,361.0	4,119,085	5,363.0	7,357,668	5,161.0	8,390,152	5,215.0
COMMON	83,548	98.1	105,541	130.2	248,474	159.9	345,061	144.8
BASE	667,525	522.7	221,527	398.4	187,612	344.7	142,599	321.8
PECULIAR	358,227	503.0	211,397	376.0	176,766	327.0	135,590	307.0
COMMON	9,298	19.7	10,130	22.4	10,846	17.7	7,009	14.8
DEPOT	2,938,949	1,135.0	1,793,527	2,515.1	3,978,346	2,506.6	5,322,438	2,418.2
PECULIAR	2,900,856	1,094.0	1,749,127	2,457.0	3,826,714	2,429.0	5,125,275	2,343.0
COMMON	38,093	41.0	44,400	58.1	151,632	17.6	197,163	75.2
OVERHAUL	3,782,456	1,801.4	2,207,573	2,579.7	3,440,188	2,469.6	4,270,162	2,619.8
PECULIAR	3,746,304	1,764.0	2,158,561	2,540.0	3,354,191	2,405.0	4,129,273	2,565.0
COMMON	36,152	37.4	49,012	69.7	85,997	64.6	140,889	54.8
AVIONICS								
TOTAL	1,596,597	178.3	1,529,711	232.9	1,773,172	222.6	1,058,825	132.1
PECULIAR	1,378,069	158.0	1,319,217	224.0	1,768,163	217.0	1,017,208	128.0
COMMON	18,528	20.3	10,494	8.9	5,009	5.6	41,617	4.1
BASE	27,512	2.9	13,206	12.1	6,671	7.3	12,756	11.1
PECULIAR	26,065	2.0	12,027	10.0	4,155	4.0	11,901	10.0
COMMON	1,447	1.9	1,179	2.1	2,516	3.3	855	1.1
DEPOT	577,745	78.2	541,687	59.5	916,429	112.2	455,429	57.1
PECULIAR	567,722	67.0	539,729	49.0	915,004	111.0	415,276	55.0
COMMON	10,023	11.2	1,958	1.5	1,425	1.2	40,153	2.1
OVERHAUL	791,341	76.2	974,825	170.2	850,174	103.1	590,641	63.9
PECULIAR	784,283	69.0	967,461	165.0	849,005	102.0	590,032	63.0
COMMON	7,058	7.2	7,364	5.2	1,169	1.0	609	.9
PROPULSION								
TOTAL	37,447	31.0	32,724	30.0	23,747	29.0	77,899	18.0
PECULIAR	37,447	31.0	32,724	30.0	23,747	29.0	77,899	18.0
COMMON	0	.0	0	.0	0	.0	0	.0
BASE	0	.0	0	.0	0	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	0	.0
DEPOT	22,288	18.0	14,859	12.0	12,025	15.0	38,950	9.0
PECULIAR	22,288	18.0	14,859	12.0	12,025	15.0	38,950	9.0
COMMON	0	.0	0	.0	0	.0	0	.0
OVERHAUL	15,161	13.0	17,866	18.0	11,723	14.0	38,950	9.0
PECULIAR	15,161	13.0	17,866	18.0	11,723	14.0	38,950	9.0
COMMON	0	.0	0	.0	0	.0	0	.0
MDS TOTAL								
TOTAL	8,522,977	3,668.4	5,787,061	5,756.1	9,401,061	5,572.5	9,871,937	5,509.9
PECULIAR	8,420,900	3,550.0	5,671,025	5,617.0	9,149,577	5,407.0	9,485,258	5,361.0
COMMON	102,076	118.4	116,035	139.1	251,483	165.5	386,678	148.9
BASE	695,037	546.6	234,727	410.5	194,283	352.0	155,355	332.9
PECULIAR	684,292	525.0	223,424	386.0	180,921	331.0	147,491	317.0
COMMON	10,745	21.6	11,303	24.5	13,362	21.0	7,864	15.9
DEPOT	3,538,982	1,231.2	2,452,073	2,577.7	4,906,700	2,633.9	4,816,817	2,484.2
PECULIAR	3,490,859	1,179.0	2,403,714	2,518.0	4,753,742	2,555.0	4,579,500	2,407.0
COMMON	48,122	52.2	48,358	59.7	152,957	78.9	237,316	77.2
OVERHAUL	4,588,958	1,890.6	3,200,264	2,768.0	4,302,085	2,586.6	4,899,753	2,692.7
PECULIAR	4,545,747	1,846.0	3,143,887	2,713.0	4,214,918	2,521.0	4,758,254	2,637.0
COMMON	43,210	44.6	56,376	55.0	87,166	65.6	141,498	55.7

Table C.7

MODEL/DESIGN/SERIES KC135A, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	14,093,436	10,783.9	13,234,099	10,875.8	18,165,107	12,792.9	14,960,730	11,078.6
PECULIAR	477,702	838.0	359,024	604.0	358,064	310.0	623,424	663.0
COMMON	13,615,734	9,945.9	12,875,075	10,271.8	17,807,043	12,482.9	14,337,306	10,415.6
BASE	840,486	1,042.0	629,149	937.3	3,317,767	2,257.4	2,542,913	1,920.0
PECULIAR	4,638	4.0	5,340	7.0	39,513	177.0	75,821	228.0
COMMON	835,848	1,038.0	623,809	930.3	3,278,254	2,080.4	2,467,092	1,692.0
DEPOT	6,422,392	3,797.5	6,435,091	4,892.5	7,970,535	5,524.1	6,422,506	4,514.6
PECULIAR	225,492	407.0	113,586	201.0	148,781	65.0	325,224	379.0
COMMON	6,196,900	3,390.5	6,321,505	4,691.5	7,821,754	5,459.1	6,097,282	4,135.6
OVERHAUL	6,830,561	5,944.3	6,169,849	5,046.1	6,876,824	5,011.2	5,995,315	4,641.9
PECULIAR	247,573	427.0	240,099	396.0	169,771	68.0	222,379	56.0
COMMON	6,582,988	5,517.3	5,929,750	4,650.1	6,707,053	4,943.2	5,772,936	4,587.9
AVIONICS								
TOTAL	3,211,550	1,186.1	752,050	403.2	488,071	420.3	443,209	338.0
PECULIAR	156,393	11.0	12,293	6.0	21,490	1.0	0	0
COMMON	3,055,157	1,175.1	739,757	397.2	466,581	419.3	443,209	338.0
BASE	88,405	58.4	41,808	58.0	85,358	86.2	140,489	98.1
PECULIAR	2,049	1.0	8,196	4.0	21,490	1.0	0	0
COMMON	86,356	57.4	35,612	54.0	63,868	85.2	140,489	98.1
DEPOT	1,714,379	691.7	135,697	89.1	208,479	182.1	176,875	150.3
PECULIAR	76,919	5.0	2,040	1.0	0	0	0	0
COMMON	1,637,460	686.7	133,648	88.1	208,479	182.1	176,875	150.3
OVERHAUL	1,408,765	436.0	572,547	256.1	194,233	152.0	125,849	89.6
PECULIAR	77,405	5.0	2,049	1.0	0	0	0	0
COMMON	1,331,360	431.0	570,498	255.1	194,233	152.0	125,849	89.6
PROPULSION								
TOTAL	921,768	871.6	931,405	857.6	814,336	698.2	1,574,298	954.1
PECULIAR	18,183	22.0	11,315	6.0	74,781	21.0	79,547	15.0
COMMON	885,585	849.6	920,090	851.6	739,555	677.2	1,494,751	939.1
BASE	5,011	18.8	2,904	11.6	14,802	20.5	4,054	15.6
PECULIAR	0	0	0	0	0	0	0	0
COMMON	5,011	18.8	2,904	11.6	14,802	20.5	4,054	15.6
DEPOT	470,733	479.8	469,499	522.5	439,779	395.3	826,185	488.1
PECULIAR	17,516	10.0	5,658	3.0	58,637	16.0	58,700	12.0
COMMON	453,197	469.8	463,841	519.5	381,142	379.3	767,485	476.1
OVERHAUL	448,006	373.0	459,004	323.6	379,759	282.4	744,062	450.1
PECULIAR	20,647	12.0	5,658	3.0	16,145	5.0	20,848	3.0
COMMON	427,359	361.0	453,346	320.6	363,614	277.4	723,214	447.1
MDS TOTAL								
TOTAL	18,228,754	12,841.6	14,917,554	12,136.7	19,487,514	13,911.3	16,978,217	12,370.6
PECULIAR	672,278	871.0	382,632	616.0	454,335	332.0	702,971	678.0
COMMON	17,556,476	11,970.6	14,534,922	11,520.7	19,033,179	13,579.3	16,275,246	11,692.6
BASE	933,922	1,119.3	675,861	1,006.8	3,417,927	2,364.0	2,687,456	2,033.7
PECULIAR	6,687	5.0	13,536	11.0	61,003	178.0	75,821	228.0
COMMON	927,234	1,114.3	662,324	995.8	3,356,923	2,186.0	2,611,633	1,805.7
DEPOT	8,607,504	4,969.1	7,040,287	5,504.1	8,618,793	6,101.6	7,425,566	5,153.1
PECULIAR	319,967	422.0	121,293	205.0	207,418	81.0	383,924	391.0
COMMON	8,287,537	4,547.1	6,918,994	5,299.1	8,411,374	6,020.6	7,041,641	4,762.1
OVERHAUL	8,687,332	6,751.2	7,201,400	5,625.8	7,450,816	5,445.6	6,865,226	5,183.8
PECULIAR	345,625	444.0	247,806	400.0	185,916	73.0	243,227	59.0
COMMON	8,341,707	6,307.2	6,953,594	5,225.8	7,264,899	5,372.6	6,621,998	5,124.8

Table C.8

MODEL/DESIGN/SERIES C141A, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

AIRFRAME	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
TOTAL	10,637,383	6,336.8	9,638,103	8,697.3	12,405,851	8,564.1	9,806,026	7,319.1
PECULIAR	9,520,562	4,927.0	8,498,123	5,631.0	11,335,644	5,876.0	8,326,276	5,082.0
COMMON	1,116,821	1,409.8	1,139,980	3,066.3	1,070,207	2,688.1	1,479,750	2,237.1
BASE	740,397	726.0	715,923	659.9	716,870	653.5	542,444	662.5
PECULIAR	712,464	637.0	642,157	563.0	681,185	564.0	509,289	579.0
COMMON	27,933	89.0	73,766	96.9	35,685	89.5	33,155	83.5
DEPOT	4,739,887	2,574.0	4,067,253	1,903.8	5,961,338	4,130.9	4,479,802	3,214.7
PECULIAR	4,185,038	1,960.0	3,540,956	2,404.0	5,441,273	2,808.0	3,732,517	2,200.0
COMMON	554,849	614.0	526,337	1,499.8	520,065	1,322.9	747,285	1,014.7
OVERHAUL	5,157,103	3,036.8	4,854,888	4,133.5	5,727,640	3,779.7	4,783,768	3,441.8
PECULIAR	4,623,062	2,130.0	4,115,010	2,664.0	5,213,187	2,504.0	4,084,471	2,303.0
COMMON	534,041	706.8	539,878	1,469.5	514,453	1,275.7	699,297	1,138.8
AVIONICS								
TOTAL	2,339,789	801.1	1,124,281	497.4	639,629	250.2	1,761,245	259.9
PECULIAR	1,103,140	246.0	285,052	54.0	176,062	69.0	1,402,734	111.0
COMMON	1,236,649	555.1	839,229	443.4	463,567	181.2	358,511	148.9
BASE	46,856	65.0	134,963	61.6	130,758	76.6	31,498	60.3
PECULIAR	4,009	16.0	7,728	2.0	63,125	23.0	2,355	18.0
COMMON	42,847	49.0	127,235	59.6	67,633	53.6	29,143	42.3
DEPOT	1,333,995	431.8	274,073	216.8	266,520	110.7	1,561,429	114.2
PECULIAR	645,021	147.0	81,473	16.0	58,443	40.0	1,394,494	60.0
COMMON	688,974	284.8	192,600	200.8	208,077	70.7	166,935	54.2
OVERHAUL	958,939	304.3	715,253	219.0	242,350	62.9	168,313	85.4
PECULIAR	454,112	83.0	195,852	36.0	54,494	1.0	5,886	33.0
COMMON	504,827	221.3	519,401	183.0	187,856	51.9	162,427	52.4
PROPULSION								
TOTAL	965,625	783.4	680,752	516.3	531,049	516.4	425,889	528.1
PECULIAR	960,814	776.0	680,568	516.0	527,571	511.0	413,254	520.0
COMMON	4,811	7.4	184	3	3,478	5.4	12,635	8.1
BASE	36,008	55.0	23,933	33.0	10,835	27.0	17,491	23.0
PECULIAR	36,008	55.0	23,933	33.0	10,835	27.0	14,402	22.0
COMMON	0	0	0	0	0	0	3,089	1.0
DEPOT	575,213	442.1	374,345	257.2	324,160	291.7	221,281	262.8
PECULIAR	573,162	439.0	374,240	257.0	322,421	289.0	216,380	259.0
COMMON	2,051	3.1	105	2	1,739	2.7	4,901	3.8
OVERHAUL	354,407	286.2	282,478	226.1	196,056	197.7	187,119	242.4
PECULIAR	351,646	282.0	282,199	226.0	194,317	195.0	182,473	239.0
COMMON	2,761	4.2	79	1	1,739	2.7	4,646	3.4
MDS TOTAL								
TOTAL	13,942,797	7,921.3	11,443,136	9,710.9	13,576,529	9,330.7	11,993,160	8,107.1
PECULIAR	11,584,516	5,949.0	9,461,743	6,201.0	12,039,277	6,456.0	10,142,264	5,713.0
COMMON	2,358,281	1,972.3	1,973,393	3,509.9	1,537,252	2,874.7	1,850,896	2,394.1
BASE	823,261	846.0	874,817	754.5	858,463	757.1	591,433	745.8
PECULIAR	752,480	708.0	673,815	598.0	755,144	614.0	526,046	619.0
COMMON	70,780	138.0	201,001	156.5	103,318	143.1	65,387	126.8
DEPOT	6,649,095	3,447.9	4,715,711	4,377.8	6,552,018	4,533.3	6,262,512	3,591.8
PECULIAR	5,403,221	2,546.0	3,996,669	2,677.0	5,822,137	3,137.0	5,343,391	2,519.0
COMMON	1,245,874	901.9	719,042	1,700.8	729,881	1,396.3	919,121	1,072.8
OVERHAUL	6,470,449	3,627.3	5,852,619	4,578.6	6,166,046	4,040.3	5,139,200	3,769.6
PECULIAR	5,428,820	2,695.0	4,793,261	2,926.0	5,461,998	2,705.0	4,272,810	2,575.0
COMMON	1,041,629	932.3	1,059,358	1,652.6	704,048	1,335.3	866,370	1,194.6

Table C.9

MODEL/DESIGN/SERIES F004C, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	2,670,552	723.1	2,385,717	727.8	4,664,248	1,522.3	3,735,056	1,923.4
PECULIAR	893,652	86.0	1,028,680	82.0	2,172,713	152.0	1,188,935	117.0
COMMON	1,776,900	637.1	1,357,037	645.8	2,491,535	1,370.3	2,546,121	1,806.4
BASE	210,986	97.0	187,977	75.2	176,062	305.3	162,167	335.2
PECULIAR	3,347	3.0	4,863	2.0	0	0	0	0
COMMON	207,639	94.0	183,114	73.2	176,062	305.3	162,167	335.2
DEPOT	1,132,230	327.9	1,087,771	295.7	2,394,768	658.3	1,851,918	750.2
PECULIAR	464,934	60.0	511,103	55.0	1,174,218	103.0	604,181	76.0
COMMON	667,296	267.9	576,668	240.7	1,220,550	555.3	1,247,737	674.2
OVERHAUL	1,327,347	298.2	1,109,970	356.8	2,093,444	558.7	1,720,939	838.0
PECULIAR	425,172	21.0	512,715	25.0	998,495	49.0	584,754	41.0
COMMON	902,175	277.2	597,255	331.8	1,094,949	509.7	1,136,185	797.0
AVIONICS								
TOTAL	1,146,546	366.1	1,124,667	385.3	611,814	250.0	744,510	222.6
PECULIAR	454,508	93.0	390,576	96.0	249,054	35.0	227,598	36.0
COMMON	692,038	273.1	734,091	289.3	362,760	215.0	516,912	186.6
BASE	68,000	41.1	50,167	37.1	21,375	11.2	25,580	10.1
PECULIAR	25,381	7.0	24,218	18.0	2,201	1.0	7,171	2.0
COMMON	42,619	34.1	25,949	19.1	19,174	10.2	18,409	8.1
DEPOT	578,208	197.7	429,108	153.6	353,683	158.7	363,959	108.1
PECULIAR	237,853	53.0	156,165	29.0	131,106	18.0	112,577	18.0
COMMON	340,355	144.7	272,943	124.6	222,577	140.7	251,382	90.1
OVERHAUL	509,346	127.3	645,195	194.6	236,760	80.3	354,974	104.5
PECULIAR	191,774	33.0	210,194	49.0	115,749	16.0	107,852	16.0
COMMON	309,072	94.3	435,201	145.6	121,011	64.1	247,122	88.5
PROPULSION								
TOTAL	73,057	102.3	52,933	76.9	82,573	126.1	88,817	107.7
PECULIAR	0	0	0	0	0	0	0	0
COMMON	73,057	102.3	52,933	76.9	82,573	126.1	88,817	107.7
BASE	3,458	4.0	4,629	6.5	11,558	21.2	1,626	3.2
PECULIAR	0	0	0	0	0	0	0	0
COMMON	3,458	4.0	4,629	6.5	11,558	21.2	1,626	3.2
DEPOT	32,298	45.2	19,301	27.6	35,185	52.1	44,353	53.4
PECULIAR	0	0	0	0	0	0	0	0
COMMON	32,298	45.2	19,301	27.6	35,185	52.1	44,353	53.4
OVERHAUL	37,303	53.0	29,006	42.9	35,833	52.8	42,839	51.1
PECULIAR	0	0	0	0	0	0	0	0
COMMON	37,303	53.0	29,006	42.9	35,833	52.8	42,839	51.1
MDS TOTAL								
TOTAL	3,890,155	1,191.5	3,563,117	1,190.1	5,358,635	1,898.4	4,568,383	2,253.8
PECULIAR	1,348,160	179.0	1,419,256	178.0	2,421,767	187.0	1,416,533	153.0
COMMON	2,541,994	1,012.5	2,144,060	1,012.1	2,936,867	1,711.4	3,151,849	2,100.8
BASE	282,444	142.1	242,773	118.8	208,995	337.7	189,373	348.6
PECULIAR	28,728	10.0	29,081	20.0	2,201	1.0	7,171	2.0
COMMON	253,715	132.2	213,691	98.8	206,792	336.7	182,200	346.6
DEPOT	1,742,736	570.8	1,536,180	476.9	2,783,636	869.2	2,260,250	911.6
PECULIAR	702,787	113.0	667,268	84.0	1,305,324	121.0	716,758	94.0
COMMON	1,039,948	457.8	868,911	392.9	1,478,311	748.2	1,543,491	817.6
OVERHAUL	1,864,996	478.5	1,784,371	594.1	2,366,027	691.6	2,118,752	993.6
PECULIAR	616,666	56.0	722,909	74.0	1,114,244	65.0	692,606	57.0
COMMON	1,248,329	422.5	1,061,461	520.3	1,251,782	626.6	1,426,145	936.6

Table C.10

MODEL/DESIGN/SERIES RF004C, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	1,220,401	1,205.1	2,021,281	1,236.6	4,010,588	2,360.1	4,408,017	3,120.2
PECULIAR	481,415	140.0	141,444	52.0	184,212	92.0	307,877	92.0
COMMON	2,739,086	1,065.1	1,879,837	1,184.6	3,826,376	2,268.1	4,100,140	3,028.2
BASE	295,422	136.5	233,008	109.6	265,346	471.1	261,786	538.1
PECULIAR	38,872	6.0	24,792	5.0	3,126	5.0	3,461	3.0
COMMON	256,550	130.5	208,216	104.6	262,210	466.1	258,325	535.1
DEPOT	1,294,063	543.8	852,671	498.4	1,985,295	978.0	2,172,844	1,223.4
PECULIAR	235,066	72.0	39,641	13.0	125,284	51.0	164,973	48.0
COMMON	1,058,997	471.8	813,030	485.4	1,860,011	927.0	2,007,871	1,175.4
OVERHAUL	1,630,933	524.9	935,602	628.7	1,759,978	911.0	1,973,381	1,358.6
PECULIAR	207,478	62.0	77,013	34.0	55,804	36.0	119,444	41.0
COMMON	1,423,555	462.9	858,589	594.7	1,704,174	875.0	1,853,937	1,317.6
AVIONICS								
TOTAL	5,201,995	976.9	3,459,656	602.8	2,305,663	516.2	3,365,403	491.1
PECULIAR	2,886,991	526.0	1,582,779	281.0	1,042,859	238.0	1,419,236	273.0
COMMON	2,317,004	450.9	1,876,877	321.8	1,262,804	278.2	1,946,167	218.1
BASE	145,108	130.3	159,705	17.3	144,394	19.5	97,764	24.0
PECULIAR	83,971	71.0	97,542	7.0	124,669	10.0	59,942	16.0
COMMON	61,137	59.3	62,163	10.3	19,725	9.5	37,822	8.0
DEPOT	2,492,161	466.7	1,345,430	274.4	1,139,973	299.5	1,741,144	225.1
PECULIAR	1,300,440	257.0	609,151	138.0	538,074	164.0	740,645	115.0
COMMON	1,191,721	209.7	736,279	136.4	601,899	135.5	1,000,499	110.1
OVERHAUL	2,566,740	379.9	1,954,524	311.0	1,021,300	197.2	1,526,496	242.0
PECULIAR	1,502,585	198.0	876,087	136.0	380,118	64.0	618,650	142.0
COMMON	1,064,155	181.9	1,078,437	175.0	641,182	133.2	907,846	100.0
PROPULSION								
TOTAL	106,099	148.7	75,467	109.9	124,365	189.9	141,631	172.0
PECULIAR	0	0	0	0	0	0	0	0
COMMON	106,099	148.7	75,467	109.9	124,365	189.9	141,631	172.0
BASE	5,042	5.8	6,635	9.3	17,407	31.9	2,580	5.2
PECULIAR	0	0	0	0	0	0	0	0
COMMON	5,042	5.8	6,635	9.3	17,407	31.9	2,580	5.2
DEPOT	46,880	65.7	27,462	39.3	52,993	78.5	70,609	85.0
PECULIAR	0	0	0	0	0	0	0	0
COMMON	46,880	65.7	27,462	39.3	52,993	78.5	70,609	85.0
OVERHAUL	54,180	77.1	41,374	61.3	53,969	79.6	68,444	81.8
PECULIAR	0	0	0	0	0	0	0	0
COMMON	54,180	77.1	41,374	61.3	53,969	79.6	68,444	81.8
MDS TOTAL								
TOTAL	8,530,495	2,330.7	5,556,404	1,949.3	6,440,616	3,066.3	7,915,051	3,783.3
PECULIAR	3,368,306	666.0	1,724,223	313.0	1,227,071	330.0	1,727,113	365.0
COMMON	5,162,188	1,664.7	3,832,180	1,636.3	5,213,544	2,736.3	6,187,937	3,418.3
BASE	445,572	272.7	399,348	136.2	427,137	522.5	362,130	567.3
PECULIAR	122,843	77.0	122,334	12.0	127,795	15.0	63,403	19.0
COMMON	322,728	195.7	277,013	124.2	299,341	507.5	298,726	548.3
DEPOT	3,833,104	1,076.2	2,225,568	812.1	3,178,361	1,356.0	3,984,597	1,533.6
PECULIAR	1,535,506	329.0	648,792	151.0	663,358	215.0	905,618	163.0
COMMON	2,297,597	747.2	1,576,775	661.1	2,514,902	1,141.0	3,078,978	1,370.6
OVERHAUL	4,251,853	981.9	2,931,500	1,000.9	2,835,247	1,187.8	3,568,323	1,682.5
PECULIAR	1,709,963	260.0	953,100	170.0	435,922	100.0	758,094	183.0
COMMON	2,541,889	721.8	1,978,399	830.9	2,399,324	1,087.8	2,810,228	1,499.5

Table C.11

MODEL/DESIGN/SERIES F004D, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	3,219,722	1,215.8	3,011,749	1,693.3	4,484,295	2,450.3	4,728,466	3,238.5
PECULIAR	72,463	5.0	364,304	19.0	120,720	6.0	143,665	9.0
COMMON	3,147,259	1,210.8	2,647,445	1,674.3	4,363,575	2,444.3	4,584,801	3,229.5
BASE	354,715	155.9	406,793	247.7	294,717	499.0	277,940	558.3
PECULIAR	434	1.0	62,071	3.0	0	0	0	0
COMMON	354,281	154.9	344,722	244.7	294,717	499.0	277,940	558.3
DEPOT	1,228,798	535.5	1,240,890	648.2	2,267,368	1,043.1	2,295,131	1,259.7
PECULIAR	51,910	3.0	120,720	6.0	120,720	6.0	43,065	4.0
COMMON	1,176,888	532.5	1,120,170	642.2	2,146,648	1,037.1	2,252,066	1,255.7
OVERHAUL	1,636,205	524.3	1,364,065	797.4	1,922,217	908.2	2,155,407	1,420.6
PECULIAR	20,120	1.0	181,514	10.0	0	0	100,600	5.0
COMMON	1,616,085	523.3	1,182,551	787.4	1,922,217	908.2	2,054,807	1,415.6
AVIONICS								
TOTAL	2,246,326	635.4	2,573,366	617.9	2,311,492	498.1	2,451,100	430.7
PECULIAR	781,561	91.0	1,275,592	138.0	1,689,709	211.0	1,596,519	151.0
COMMON	1,464,765	544.4	1,297,774	479.9	621,783	287.1	854,581	279.7
BASE	134,843	78.2	167,215	38.6	332,046	24.3	300,927	28.7
PECULIAR	77,681	8.0	118,235	6.0	292,999	9.0	265,557	12.0
COMMON	57,162	70.2	48,980	32.6	39,047	15.3	35,370	16.7
DEPOT	1,204,104	337.6	784,216	246.2	1,162,527	311.6	1,095,353	209.6
PECULIAR	443,171	62.0	301,506	41.0	787,370	133.0	678,942	76.0
COMMON	760,933	275.6	482,710	205.2	375,157	178.6	416,411	133.6
OVERHAUL	907,379	219.6	1,621,936	333.2	876,922	162.1	1,054,823	192.3
PECULIAR	260,710	21.0	855,852	91.0	609,342	69.0	652,022	63.0
COMMON	646,669	198.6	766,084	242.2	207,580	93.1	402,801	129.3
PROPULSION								
TOTAL	124,898	175.1	92,928	135.3	140,198	214.1	151,956	184.3
PECULIAR	0	0	0	0	0	0	0	0
COMMON	124,898	175.1	92,928	135.3	140,198	214.1	151,956	184.3
BASE	5,935	6.9	8,169	11.5	19,623	35.9	2,782	5.6
PECULIAR	0	0	0	0	0	0	0	0
COMMON	5,935	6.9	8,169	11.5	19,623	35.9	2,782	5.6
DEPOT	55,187	77.4	33,816	48.4	59,739	88.5	75,884	91.3
PECULIAR	0	0	0	0	0	0	0	0
COMMON	55,187	77.4	33,816	48.4	59,739	88.5	75,884	91.3
OVERHAUL	63,779	90.8	50,946	75.4	60,840	89.7	73,293	87.5
PECULIAR	0	0	0	0	0	0	0	0
COMMON	63,779	90.8	50,946	75.4	60,840	89.7	73,293	87.5
MDS TOTAL								
TOTAL	5,590,946	2,026.2	5,678,043	2,446.6	6,935,985	3,162.5	7,331,522	3,853.5
PECULIAR	854,024	96.0	1,639,896	157.0	1,810,429	217.0	1,740,184	160.0
COMMON	4,736,921	1,930.2	4,038,146	2,289.6	5,125,555	2,945.5	5,591,337	3,693.5
BASE	495,493	241.0	582,177	297.7	646,386	559.3	581,649	592.5
PECULIAR	78,115	9.0	180,306	9.0	292,999	9.0	265,557	12.0
COMMON	417,377	232.0	401,870	288.7	353,385	550.3	316,090	580.5
DEPOT	2,488,089	950.5	2,058,922	942.8	3,489,634	1,443.3	3,466,368	1,560.6
PECULIAR	495,081	65.0	422,226	47.0	908,090	139.0	722,007	80.0
COMMON	1,993,007	885.5	1,636,695	895.8	2,581,543	1,304.3	2,744,360	1,480.6
OVERHAUL	2,607,363	834.7	3,036,947	1,206.1	2,799,979	1,159.9	3,283,523	1,700.4
PECULIAR	280,830	22.0	1,037,366	101.0	609,342	69.0	752,622	68.0
COMMON	2,326,532	812.7	1,999,580	1,105.1	2,190,635	1,090.9	2,530,900	1,632.4

Table C.12

MODEL/DESIGN/SERIES F004E, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	3,620,207	1,507.3	2,846,651	2,245.1	3,954,055	3,787.6	5,470,777	5,067.5
PECULIAR	64,252	31.0	187,227	57.0	298,435	101.0	526,040	121.0
COMMON	3,555,955	1,476.3	2,659,424	2,188.1	3,655,620	3,686.6	4,944,737	4,946.5
BASE	400,745	193.6	449,836	333.9	521,460	834.3	484,904	937.1
PECULIAR	20,475	12.0	79,440	19.0	43,892	28.0	55,824	25.0
COMMON	380,270	181.6	370,396	314.9	477,568	806.3	429,080	912.1
DEPOT	1,334,651	665.7	1,003,780	858.3	1,823,504	1,588.1	2,506,959	1,910.0
PECULIAR	20,142	10.0	53,227	16.0	181,268	40.0	250,245	54.0
COMMON	1,314,509	655.7	950,553	842.3	1,642,236	1,548.1	2,256,714	1,856.0
OVERHAUL	1,884,800	648.0	1,393,041	1,052.8	1,609,092	1,365.2	2,478,904	2,220.5
PECULIAR	23,635	9.0	54,560	22.0	73,276	33.0	219,972	42.0
COMMON	1,861,165	639.0	1,338,481	1,030.8	1,535,816	1,332.2	2,258,932	2,178.5
AVIONICS								
TOTAL	2,823,872	825.2	1,927,845	767.3	1,393,579	508.9	1,016,154	638.5
PECULIAR	1,410,402	357.0	760,435	339.0	695,418	202.0	245,313	47.0
COMMON	1,413,470	468.2	1,167,410	428.3	698,161	306.9	770,841	591.5
BASE	109,616	87.9	140,929	46.6	113,831	22.9	190,152	35.2
PECULIAR	42,172	3.0	75,164	6.0	64,842	3.0	49,627	5.0
COMMON	67,444	84.9	65,765	40.6	48,989	19.9	140,525	30.2
DEPOT	1,427,286	409.5	671,209	298.8	738,446	300.0	440,581	361.1
PECULIAR	734,587	198.0	299,557	127.0	321,247	105.0	95,093	21.0
COMMON	692,699	211.5	371,652	171.8	417,199	195.0	345,488	340.1
OVERHAUL	1,286,971	327.8	1,115,706	421.9	541,308	185.9	385,420	242.2
PECULIAR	633,644	156.0	385,715	206.0	309,329	94.0	100,593	21.0
COMMON	653,327	171.8	729,991	215.9	231,979	91.9	284,827	221.2
PROPULSION								
TOTAL	159,792	224.0	128,082	180.5	234,768	355.4	257,978	310.1
PECULIAR	0	0.0	0	0.0	0	0.0	0	0.0
COMMON	159,792	224.0	128,082	180.5	234,768	355.4	257,978	310.1
BASE	7,593	8.8	11,259	15.8	32,388	59.3	4,606	9.2
PECULIAR	0	0.0	0	0.0	0	0.0	0	0.0
COMMON	7,593	8.8	11,259	15.8	32,388	59.3	4,606	9.2
DEPOT	70,604	99.0	46,607	66.7	101,962	148.1	127,777	152.8
PECULIAR	0	0.0	0	0.0	0	0.0	0	0.0
COMMON	70,604	99.0	46,607	66.7	101,962	148.1	127,777	152.8
OVERHAUL	81,598	116.1	70,218	104.0	100,420	148.1	125,598	148.1
PECULIAR	0	0.0	0	0.0	0	0.0	0	0.0
COMMON	81,598	116.1	70,218	104.0	100,420	148.1	125,598	148.1
MDS TOTAL								
TOTAL	6,604,871	2,556.5	4,902,578	3,198.9	5,582,402	4,651.9	6,744,909	6,016.2
PECULIAR	1,474,654	388.0	947,662	396.0	993,853	303.0	771,353	168.0
COMMON	5,129,216	2,168.5	3,954,915	2,802.9	4,588,548	4,348.9	5,973,555	5,848.2
BASE	517,954	290.4	602,024	396.3	667,679	916.5	679,662	981.5
PECULIAR	62,647	15.0	154,604	25.0	108,734	31.0	105,451	30.0
COMMON	455,306	275.4	447,419	371.3	558,944	885.5	574,210	951.5
DEPOT	2,812,541	1,174.3	1,721,596	1,223.9	2,663,912	2,036.2	3,075,317	2,423.9
PECULIAR	754,729	208.0	352,784	143.0	502,515	145.0	345,338	75.0
COMMON	2,077,811	966.3	1,368,811	1,080.9	2,161,396	1,891.2	2,729,978	2,348.9
OVERHAUL	3,251,369	1,092.0	2,578,965	1,578.8	2,250,820	1,699.2	2,989,922	2,610.8
PECULIAR	657,279	165.0	440,275	228.0	382,605	127.0	320,565	63.0
COMMON	2,594,089	927.0	2,138,689	1,350.8	1,868,214	1,572.2	2,669,356	2,547.8

Table C.13

MODEL/DESIGN/SERIES F015A, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	54	.1	147,368	167.8	1,071,889	25.1	1,071,889	1,355.7
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	54	.1	147,368	167.8	1,071,889	25.1	1,071,889	1,355.7
BASE	8	.0	33,087	123.1	12,956	4.0	366,661	1,137.2
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	8	.0	33,087	123.1	12,956	4.0	366,661	1,137.2
DEPOT	42	.1	7,793	6.9	47,867	14.3	551,116	109.6
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	42	.1	7,793	6.9	47,867	14.3	551,116	109.6
OVERHAUL	6	.0	106,491	37.7	16,020	7.2	456,123	108.9
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	6	.0	106,491	37.7	16,020	7.2	456,123	108.9
AVIONICS								
TOTAL	1,355	.8	3,243	2.1	2,859,365	83.2	1,177,423	82.2
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	1,355	.8	3,243	2.1	2,859,365	83.2	1,177,423	82.2
BASE	13	.0	60	.1	12,172	1.7	760	.3
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	13	.0	60	.1	12,172	1.7	760	.3
DEPOT	665	.4	1,075	.8	2,838,311	75.4	1,131,046	74.5
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	665	.4	1,075	.8	2,838,311	75.4	1,131,046	74.5
OVERHAUL	680	.4	2,112	1.2	8,885	6.2	45,622	7.3
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	680	.4	2,112	1.2	8,885	6.2	45,622	7.3
PROPULSION								
TOTAL	0	.0	361	.8	0	.0	459,163	75.3
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	361	.8	0	.0	459,163	75.3
BASE	0	.0	0	.0	0	.0	605	.9
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	605	.9
DEPOT	0	.0	0	.0	0	.0	442,176	59.9
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	442,176	59.9
OVERHAUL	0	.0	361	.8	0	.0	16,385	14.6
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	361	.8	0	.0	16,385	14.6
MDS TOTAL								
TOTAL	1,409	.9	150,972	170.6	2,936,200	108.8	3,008,475	1,513.2
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	1,409	.9	150,972	170.6	2,936,200	108.8	3,008,475	1,513.2
BASE	21	.1	33,147	123.2	25,122	5.7	366,026	1,138.4
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	21	.1	33,147	123.2	25,122	5.7	366,026	1,138.4
DEPOT	707	.5	8,868	7.7	2,886,178	89.7	2,124,338	244.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	707	.5	8,868	7.7	2,886,178	89.7	2,124,338	244.0
OVERHAUL	686	.4	108,964	39.7	24,905	13.4	518,130	130.8
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	686	.4	108,964	39.7	24,905	13.4	518,130	130.8

Table C.14

MODEL/DESIGN/SERIES TF015A, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	20	.0	44,161	50.3	10,031	3.4	219,330	227.7
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	20	.0	44,161	50.3	10,031	3.4	219,330	227.7
BASE	4	.0	9,916	36.9	1,696	.6	61,317	191.2
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	4	.0	9,916	36.9	1,696	.6	61,317	191.2
DEPOT	16	.0	2,336	2.1	6,246	1.9	86,994	18.3
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	16	.0	2,336	2.1	6,246	1.9	86,994	18.3
OVERHAUL	3	.0	31,912	11.3	2,092	.9	71,014	18.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	3	.0	31,912	11.3	2,092	.9	71,014	18.1
AVIONICS								
TOTAL	492	.3	972	.6	373,100	10.9	197,108	13.9
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	492	.3	972	.6	373,100	10.9	197,108	13.9
BASE	6	.0	18	.0	1,589	.2	129	.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	6	.0	18	.0	1,589	.2	129	.1
DEPOT	242	.1	323	.2	370,353	9.8	189,164	12.4
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	242	.1	323	.2	370,353	9.8	189,164	12.4
OVERHAUL	247	.1	634	.4	1,161	.8	7,816	1.4
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	247	.1	634	.4	1,161	.8	7,816	1.4
PROPULSION								
TOTAL	0	.0	637	1.2	0	.0	77,201	12.7
PECULIAR	0	.0	529	1.0	0	.0	0	.0
COMMON	0	.0	108	.2	0	.0	77,201	12.7
BASE	0	.0	530	1.0	0	.0	103	.1
PECULIAR	0	.0	530	1.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	103	.1
DEPOT	0	.0	0	.0	0	.0	74,345	10.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	74,345	10.1
OVERHAUL	0	.0	109	.2	0	.0	2,756	2.4
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	109	.2	0	.0	2,756	2.4
MDS TOTAL								
TOTAL	512	.3	45,770	52.1	383,131	14.2	493,639	254.2
PECULIAR	0	.0	529	1.0	0	.0	0	.0
COMMON	512	.3	45,239	51.1	383,131	14.2	493,639	254.2
BASE	10	.0	10,464	37.9	3,285	.8	61,549	191.4
PECULIAR	0	.0	529	1.0	0	.0	0	.0
COMMON	10	.0	9,932	36.9	3,285	.8	61,549	191.4
DEPOT	258	.2	2,659	2.3	376,599	11.7	350,503	40.8
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	258	.2	2,659	2.3	376,599	11.7	350,503	40.8
OVERHAUL	250	.1	32,655	11.9	3,253	1.7	81,586	22.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	250	.1	32,655	11.9	3,253	1.7	81,586	22.0

Table C.15

MODEL/DESIGN/SERIES F016A, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	0	.0	18	.0	72	.1	108	.4
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	18	.0	72	.1	108	.4
BASE	0	.0	0	.0	0	.0	18	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	18	.0
DEPOT	0	.0	10	.0	45	.1	41	.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	10	.0	45	.1	41	.1
OVERHAUL	0	.0	10	.0	28	.1	53	.2
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	10	.0	28	.1	53	.2
AVIONICS								
TOTAL	0	.0	23	.0	746	.7	470	.4
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	23	.0	746	.7	470	.4
BASE	0	.0	0	.0	4	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	4	.0	0	.0
DEPOT	0	.0	3	.0	393	.5	238	.2
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	3	.0	393	.5	238	.2
OVERHAUL	0	.0	21	.0	351	.2	233	.2
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	21	.0	351	.2	233	.2
PROPULSION								
TOTAL	0	.0	0	.0	0	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	0	.0
BASE	0	.0	0	.0	0	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	0	.0
DEPOT	0	.0	0	.0	0	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	0	.0
OVERHAUL	0	.0	0	.0	0	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	0	.0
MDS TOTAL								
TOTAL	0	.0	41	.0	818	.8	578	.8
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	41	.0	818	.8	578	.8
BASE	0	.0	0	.0	4	.0	18	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	4	.0	18	.0
DEPOT	0	.0	13	.0	438	.5	279	.4
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	13	.0	438	.5	279	.4
OVERHAUL	0	.0	31	.0	379	.3	286	.4
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	31	.0	379	.3	286	.4

Table C.16

MODEL/DESIGN/SERIES F016B, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	0	.0	0	.0	11	.0	56	.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	11	.0	56	.1
BASE	0	.0	0	.0	0	.0	8	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	8	.0
DEPOT	0	.0	0	.0	7	.0	25	.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	7	.0	25	.1
OVERHAUL	0	.0	0	.0	5	.0	26	.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	5	.0	26	.1
AVIONICS								
TOTAL	0	.0	0	.0	55	.0	172	.2
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	55	.0	172	.2
BASE	0	.0	0	.0	0	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	0	.0
DEPOT	0	.0	0	.0	30	.0	87	.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	30	.0	87	.1
OVERHAUL	0	.0	0	.0	27	.0	86	.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	27	.0	86	.1
PROPULSION								
TOTAL	0	.0	0	.0	0	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	0	.0
BASE	0	.0	0	.0	0	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	0	.0
DEPOT	0	.0	0	.0	0	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	0	.0
OVERHAUL	0	.0	0	.0	0	.0	0	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	0	.0
MDS TOTAL								
TOTAL	0	.0	0	.0	66	.1	228	.3
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	66	.1	228	.3
BASE	0	.0	0	.0	0	.0	8	.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	0	.0	8	.0
DEPOT	0	.0	0	.0	37	.0	112	.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	37	.0	112	.1
OVERHAUL	0	.0	0	.0	32	.0	112	.1
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	0	.0	0	.0	32	.0	112	.1

Table C.17

MODEL/DESIGN/SERIES F111A, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

AIRCRAFT	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	2,728,082	789.6	2,215,499	678.3	1,731,015	473.2	1,514,136	465.6
PECULIAR	108,091	40.0	0	0	20,288	8.0	21,067	3.0
COMMON	2,619,991	749.6	2,215,499	678.3	1,710,727	465.2	1,493,069	462.6
BASE	41,563	33.8	14,442	10.8	11,952	9.6	63,224	15.5
PECULIAR	0	0	0	0	0	0	3,875	1.0
COMMON	41,563	33.8	14,442	10.8	11,952	9.6	59,349	14.5
DEPOT	1,289,118	366.6	1,107,022	318.9	937,124	257.2	840,921	187.3
PECULIAR	68,763	27.0	0	0	10,144	4.0	8,597	1.0
COMMON	1,220,355	339.6	1,107,022	318.9	926,980	253.2	832,324	186.3
OVERHAUL	1,197,405	389.2	1,094,036	348.5	781,962	206.4	609,980	162.1
PECULIAR	19,129	11.0	0	0	10,144	4.0	8,597	1.0
COMMON	1,178,276	378.2	1,094,036	348.5	771,818	202.4	601,383	161.1
AVIONICS								
TOTAL	2,257,177	441.0	1,994,675	256.4	2,406,365	354.5	1,589,903	299.4
PECULIAR	803,710	64.0	145,071	32.0	657,060	19.0	581,805	20.0
COMMON	1,453,467	377.0	1,849,604	224.4	1,749,305	335.5	1,008,098	279.4
BASE	2,108	2.8	1,213,003	11.9	31,863	4.6	8,946	4.7
PECULIAR	322	1.0	2,998	2.0	0	0	0	0
COMMON	1,786	1.8	1,210,005	9.9	31,863	4.6	8,946	4.7
DEPOT	1,440,533	268.9	244,935	106.0	847,425	180.9	1,025,394	213.1
PECULIAR	581,003	47.0	26,182	5.0	17,124	7.0	290,901	10.0
COMMON	859,530	221.9	218,753	101.0	830,301	173.9	734,493	203.1
OVERHAUL	824,544	169.2	536,739	138.5	1,525,092	169.0	555,764	81.6
PECULIAR	222,386	16.0	115,692	25.0	639,737	12.0	290,901	10.0
COMMON	602,158	153.2	421,047	113.5	885,355	157.0	264,863	71.6
PROPULSION								
TOTAL	64,084	56.4	41,470	22.5	55,000	22.2	66,031	34.8
PECULIAR	0	0	0	0	0	0	0	0
COMMON	64,084	56.4	41,470	22.5	55,000	22.2	66,031	34.8
BASE	1,093	2.9	0	0	935	7	5,508	6.6
PECULIAR	0	0	0	0	0	0	0	0
COMMON	1,093	2.9	0	0	935	7	5,508	6.6
DEPOT	30,184	25.7	19,038	9.9	27,220	11.2	29,045	13.7
PECULIAR	0	0	0	0	0	0	0	0
COMMON	30,184	25.7	19,038	9.9	27,220	11.2	29,045	13.7
OVERHAUL	32,810	27.7	22,433	12.5	26,850	10.3	31,481	14.5
PECULIAR	0	0	0	0	0	0	0	0
COMMON	32,810	27.7	22,433	12.5	26,850	10.3	31,481	14.5
MDS TOTAL								
TOTAL	5,049,343	1,287.0	4,251,644	957.1	4,192,380	849.9	3,170,070	699.1
PECULIAR	911,801	104.0	145,071	32.0	677,348	27.0	602,872	23.0
COMMON	4,137,541	1,183.0	4,106,571	925.1	3,515,031	822.9	2,567,197	676.1
BASE	44,764	39.5	1,227,445	22.8	46,750	14.9	77,678	25.8
PECULIAR	322	1.0	2,998	2.0	0	0	3,875	1.0
COMMON	44,440	38.5	1,224,446	20.8	46,750	14.9	73,803	25.8
DEPOT	2,749,815	661.3	1,370,995	434.9	1,811,769	449.4	1,895,162	414.1
PECULIAR	649,766	74.0	26,382	5.0	27,468	11.0	299,500	11.0
COMMON	2,100,068	587.3	1,344,611	429.9	1,784,301	438.4	1,595,661	403.1
OVERHAUL	2,254,749	586.2	1,653,208	499.5	2,333,904	385.6	1,197,225	258.2
PECULIAR	261,715	29.0	115,692	25.0	649,881	16.0	299,500	11.0
COMMON	1,993,033	557.2	1,537,514	474.5	1,684,022	369.6	897,724	247.2

Table C.18

MODEL/DESIGN/SERIES F111D, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	4,592,800	795.8	4,213,252	1,022.0	3,060,195	638.9	2,188,853	430.2
PECULIAR	2,584,210	188.0	1,548,920	157.0	1,366,010	131.0	753,512	93.0
COMMON	2,008,590	607.8	2,664,332	865.0	1,694,185	507.9	1,435,341	337.2
BASE	27,402	27.8	5,768	8.4	11,115	7.6	36,434	15.0
PECULIAR	1,369	1.0	0	.0	0	.0	0	.0
COMMON	26,033	26.8	5,768	8.4	11,115	7.6	36,434	15.0
DEPOT	2,266,623	370.2	2,013,634	484.4	1,584,258	336.6	1,161,313	222.5
PECULIAR	1,381,242	108.0	721,424	75.0	671,670	64.0	352,903	48.0
COMMON	885,381	262.2	1,292,210	409.4	912,588	272.6	808,410	174.5
OVERHAUL	2,298,789	397.8	2,193,849	529.2	1,464,821	294.7	991,100	192.8
PECULIAR	1,201,600	79.0	827,495	82.0	694,340	67.0	400,609	45.0
COMMON	1,097,189	318.8	1,366,354	447.2	770,481	227.7	590,491	147.8
AVIONICS								
TOTAL	1,463,898	338.2	2,421,779	285.9	1,860,461	304.1	1,110,822	240.7
PECULIAR	418,947	70.0	496,801	62.0	221,780	31.0	210,516	27.0
COMMON	1,044,951	268.1	1,924,978	223.9	1,638,681	273.1	900,306	213.7
BASE	944	1.6	1,374,471	13.3	25,503	4.0	8,995	5.2
PECULIAR	0	.0	226	1.0	0	.0	0	.0
COMMON	944	1.6	1,374,245	12.3	25,503	4.0	8,995	5.2
DEPOT	769,849	171.9	467,221	135.7	863,916	137.0	743,424	151.1
PECULIAR	162,187	17.0	235,628	36.0	103,703	9.0	88,082	5.0
COMMON	607,662	154.9	231,593	99.7	760,213	128.0	655,342	146.1
OVERHAUL	693,124	164.7	580,089	136.9	971,043	163.0	358,403	84.4
PECULIAR	256,760	53.0	260,949	25.0	118,077	22.0	122,415	22.0
COMMON	436,364	111.7	319,140	111.9	852,966	141.0	235,988	62.4
PROPULSION								
TOTAL	48,088	42.3	48,188	26.0	55,890	22.2	81,262	35.0
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	48,088	42.3	48,188	26.0	55,890	22.2	81,262	35.0
BASE	820	2.2	0	.0	954	.7	5,420	6.5
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	820	2.2	0	.0	954	.7	5,420	6.5
DEPOT	27,650	19.3	22,143	11.5	27,588	11.1	37,748	13.9
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	27,650	19.3	22,143	11.5	27,588	11.1	37,748	13.9
OVERHAUL	24,621	20.8	26,047	14.5	27,350	10.4	40,097	14.6
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	24,621	20.8	26,047	14.5	27,350	10.4	40,097	14.6
MDS TOTAL								
TOTAL	6,104,786	1,176.3	6,683,219	1,334.0	4,976,546	965.2	3,382,937	705.9
PECULIAR	3,003,157	258.0	2,045,721	219.0	1,587,790	162.0	964,028	120.0
COMMON	3,101,628	918.3	4,637,497	1,115.0	3,388,755	803.2	2,418,908	585.9
BASE	29,166	11.6	1,380,219	21.7	37,572	12.3	50,849	26.6
PECULIAR	1,369	1.0	226	1.0	0	.0	0	.0
COMMON	27,795	10.6	1,380,012	20.7	37,572	12.3	50,849	26.6
DEPOT	3,059,122	561.4	2,502,998	631.7	2,475,762	484.7	1,942,485	387.5
PECULIAR	1,543,429	125.0	957,052	111.0	775,373	73.0	440,985	53.0
COMMON	1,515,692	436.4	1,545,945	520.7	1,700,388	411.7	1,501,499	334.5
OVERHAUL	3,016,534	583.3	2,799,985	680.6	2,463,214	468.1	1,389,600	291.7
PECULIAR	1,458,360	132.0	1,088,444	107.0	812,417	89.0	523,044	67.0
COMMON	1,558,173	451.3	1,711,540	573.6	1,650,796	379.1	866,555	224.7

Table C.19

MODEL/DESIGN/SERIES F111F, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	3,824,432	1,265.8	4,000,360	1,281.8	1,428,976	578.0	953,555	299.0
PECULIAR	1,164,364	454.0	83,312	15.0	47,721	16.0	3,063	2.0
COMMON	2,660,068	811.8	3,917,048	1,266.8	1,381,255	562.0	950,492	297.0
BASE	34,165	33.2	6,414	12.7	13,530	11.2	33,557	12.4
PECULIAR	9,390	4.0	0	.0	0	.0	0	.0
COMMON	24,775	29.2	6,414	12.7	13,530	11.2	33,557	12.4
DEPOT	1,915,592	642.9	1,913,357	604.1	722,915	306.2	458,251	149.3
PECULIAR	734,124	287.0	9,506	6.0	23,861	8.0	1,532	1.0
COMMON	1,181,468	355.9	1,903,851	598.1	699,054	298.2	456,719	148.3
OVERHAUL	1,874,674	589.7	2,080,591	665.0	692,525	260.6	461,749	137.3
PECULIAR	420,851	163.0	73,807	9.0	23,861	8.0	1,532	1.0
COMMON	1,453,823	426.7	2,006,784	656.0	668,664	252.6	460,217	136.3
AVIONICS								
TOTAL	1,880,863	378.8	894,402	354.1	1,282,830	361.8	881,923	231.6
PECULIAR	0	.0	3,687	2.0	8,820	8.0	0	.0
COMMON	1,880,863	378.8	890,715	352.1	1,274,010	353.8	881,923	231.6
BASE	1,246	2.1	4,757	5.1	32,309	5.1	12,579	5.6
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	1,246	2.1	4,757	5.1	32,309	5.1	12,579	5.6
DEPOT	1,191,944	219.1	365,564	161.4	603,167	174.4	620,407	158.6
PECULIAR	0	.0	0	.0	4,410	4.0	0	.0
COMMON	1,191,944	219.1	365,564	161.4	598,757	170.4	620,407	158.6
OVERHAUL	687,673	157.6	524,085	187.6	647,352	182.3	248,938	67.3
PECULIAR	0	.0	3,687	2.0	4,410	4.0	0	.0
COMMON	687,673	157.6	520,398	185.6	642,942	178.3	248,938	67.3
PROPULSION								
TOTAL	45,175	49.1	60,694	31.8	52,704	19.6	62,251	32.1
PECULIAR	0	.0	40,009	12.0	0	.0	0	.0
COMMON	45,175	49.1	20,685	19.8	52,704	19.6	62,251	32.1
BASE	1,082	2.9	0	.0	117	.4	5,345	6.4
PECULIAR	0	.0	0	.0	0	.0	0	.0
COMMON	1,082	2.9	0	.0	117	.4	5,345	6.4
DEPOT	20,747	22.1	27,474	11.7	26,959	10.2	26,921	12.4
PECULIAR	0	.0	20,005	6.0	0	.0	0	.0
COMMON	20,747	22.1	7,469	7.7	26,959	10.2	26,921	12.4
OVERHAUL	23,348	24.1	33,222	18.1	25,629	9.0	29,988	11.3
PECULIAR	0	.0	20,005	6.0	0	.0	0	.0
COMMON	23,348	24.1	13,217	12.1	25,629	9.0	29,988	11.3
MDS TOTAL								
TOTAL	5,750,470	1,693.7	4,955,456	1,667.6	2,764,510	959.4	1,897,729	562.7
PECULIAR	1,164,364	454.0	127,008	29.0	56,541	24.0	3,063	2.0
COMMON	4,586,104	1,239.7	4,828,448	1,638.6	2,707,968	935.4	1,894,664	560.7
BASE	36,493	38.2	11,171	17.8	45,956	16.8	51,481	24.4
PECULIAR	9,390	4.0	0	.0	0	.0	0	.0
COMMON	27,101	34.2	11,171	17.8	45,956	16.8	51,481	24.4
DEPOT	3,128,283	884.1	2,306,395	779.1	1,353,041	490.8	1,105,579	320.4
PECULIAR	734,124	287.0	29,511	12.0	28,271	12.0	1,532	1.0
COMMON	2,394,157	597.1	2,276,883	767.1	1,324,769	478.8	1,104,045	319.4
OVERHAUL	2,585,695	771.4	2,637,898	870.7	1,365,506	451.8	740,675	217.9
PECULIAR	420,851	163.0	97,499	17.0	28,271	12.0	1,532	1.0
COMMON	2,164,842	608.4	2,540,399	853.7	1,337,234	439.8	739,141	216.9

Table C.20

MODEL/DESIGN/SERIES T037B, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	528,743	712.1	689,152	687.7	583,534	742.4	385,042	532.7
PECULIAR	149,656	69.0	47,085	16.0	53,376	8.0	76,904	26.0
COMMON	379,087	643.1	642,067	671.7	530,158	734.4	308,138	506.7
BASE	46,315	163.3	73,933	111.3	17,311	52.5	30,556	69.6
PECULIAR	9,786	14.0	28,057	4.0	417	1.0	0	0
COMMON	36,529	149.3	45,876	107.3	16,894	51.5	30,556	69.6
DEPOT	217,884	251.5	308,398	273.2	303,962	357.5	160,568	219.2
PECULIAR	72,571	29.0	13,006	6.0	26,834	4.0	25,372	12.0
COMMON	145,313	222.5	295,392	267.2	277,128	353.5	135,196	207.2
OVERHAUL	264,546	297.3	306,823	303.1	262,263	332.4	193,919	243.9
PECULIAR	67,300	26.0	6,023	6.0	26,126	3.0	51,532	14.0
COMMON	197,246	271.3	300,800	297.1	236,137	329.4	142,387	229.9
AVIONICS								
TOTAL	893,978	720.0	116,679	81.1	27,370	23.1	63,360	44.6
PECULIAR	0	0	0	0	0	0	0	0
COMMON	893,978	720.0	116,679	81.1	27,370	23.1	63,360	44.6
BASE	37,945	33.0	11,581	11.4	4,275	9.8	13,400	11.8
PECULIAR	0	0	0	0	0	0	0	0
COMMON	37,945	33.0	11,581	11.4	4,275	9.8	13,400	11.8
DEPOT	575,214	469.0	12,357	10.2	10,317	4.5	24,771	17.0
PECULIAR	0	0	0	0	0	0	0	0
COMMON	575,214	469.0	12,357	10.2	10,317	4.5	24,771	17.0
OVERHAUL	280,823	218.0	92,743	59.5	12,782	8.9	25,193	15.8
PECULIAR	0	0	0	0	0	0	0	0
COMMON	280,823	218.0	92,743	59.5	12,782	8.9	25,193	15.8
PROPULSION								
TOTAL	141,073	123.1	1,035,720	555.3	310,144	222.9	20,751	19.0
PECULIAR	29,199	14.0	917,669	440.0	0	0	0	0
COMMON	111,874	109.1	118,051	115.3	310,144	222.9	20,751	19.0
BASE	5,316	3.0	1,371	2.6	1,160	1.0	0	0
PECULIAR	4,172	2.0	0	0	0	0	0	0
COMMON	1,144	1.0	1,371	2.6	1,160	1.0	0	0
DEPOT	77,399	67.5	481,818	248.4	156,231	112.5	8,412	8.6
PECULIAR	14,600	7.0	458,815	220.0	0	0	0	0
COMMON	62,799	60.5	24,983	28.4	156,231	112.5	8,412	8.6
OVERHAUL	58,361	52.7	550,513	304.2	152,755	109.5	12,340	10.5
PECULIAR	10,429	5.0	458,815	220.0	0	0	0	0
COMMON	47,932	47.7	91,698	84.2	152,755	109.5	12,340	10.5
MDS TOTAL								
TOTAL	1,563,794	1,555.3	1,841,551	1,324.0	921,048	988.5	469,153	396.4
PECULIAR	178,855	83.0	964,754	456.0	53,376	8.0	76,904	26.0
COMMON	1,384,938	1,472.3	876,796	868.0	867,670	980.5	392,247	570.4
BASE	89,576	139.3	86,885	125.3	22,746	64.3	43,956	81.4
PECULIAR	13,958	16.0	28,057	4.0	417	1.0	0	0
COMMON	75,617	183.3	58,826	121.3	22,327	62.3	43,956	81.4
DEPOT	870,497	788.0	804,573	531.8	70,510	474.5	193,751	244.0
PECULIAR	87,171	16.0	471,841	226.0	26,834	4.0	25,372	12.0
COMMON	783,325	752.0	332,731	305.8	44,676	470.5	168,377	232.8
OVERHAUL	604,710	568.0	950,099	666.9	427,800	450.7	231,452	270.2
PECULIAR	77,729	11.0	464,858	226.0	26,126	3.0	51,532	14.0
COMMON	526,980	537.0	485,240	440.9	401,672	447.7	179,918	256.2

Table C.21

MODEL/DESIGN/SERIES T038A, FLYING HOUR MATERIEL PROGRAM,
CONDEMNATIONS AND REPLACEMENT COSTS (1978\$)

	1975		1976		1977		1978	
	\$	#	\$	#	\$	#	\$	#
AIRFRAME								
TOTAL	2,549,967	1,945.9	1,986,642	1,324.7	3,937,630	1,996.1	4,430,504	1,864.0
PECULIAR	380,249	351.0	582,724	203.0	995,455	227.0	615,893	253.0
COMMON	2,169,718	1,594.9	1,403,918	1,121.7	2,942,175	1,769.1	3,814,611	1,611.0
BASE	200,219	269.2	410,931	175.1	51,568	99.5	71,724	115.5
PECULIAR	114,912	106.0	348,446	49.0	135	11.0	6,172	9.0
COMMON	85,307	163.2	62,485	126.1	51,433	88.5	65,552	106.5
DEPOT	895,100	576.8	760,707	516.1	2,027,184	1,001.4	2,097,019	786.3
PECULIAR	114,312	65.0	78,046	54.0	497,660	108.0	294,038	120.0
COMMON	780,793	511.8	682,661	462.1	1,529,524	893.4	1,797,981	666.3
OVERHAUL	1,454,645	1,099.9	815,005	633.6	1,858,876	895.2	2,386,760	962.2
PECULIAR	151,026	180.0	156,232	100.0	497,660	108.0	315,683	130.0
COMMON	1,303,619	919.9	658,773	533.6	1,361,216	787.2	1,971,077	832.2
AVIONICS								
TOTAL	1,350,746	714.1	93,251	83.9	25,680	20.2	137,807	138.9
PECULIAR	0	0	0	0	0	0	0	0
COMMON	1,350,746	714.1	93,251	83.9	25,680	20.2	137,807	138.9
BASE	20,252	17.6	5,778	7.9	5,508	9.9	22,664	16.7
PECULIAR	0	0	0	0	0	0	0	0
COMMON	20,252	17.6	5,778	7.9	5,508	9.9	22,664	16.7
DEPOT	618,534	453.0	14,908	12.2	11,223	5.7	96,795	105.2
PECULIAR	0	0	0	0	0	0	0	0
COMMON	618,534	453.0	14,908	12.2	11,223	5.7	96,795	105.2
OVERHAUL	711,964	243.5	72,568	63.7	8,951	4.6	18,351	17.0
PECULIAR	0	0	0	0	0	0	0	0
COMMON	711,964	243.5	72,568	63.7	8,951	4.6	18,351	17.0
PROPULSION								
TOTAL	93,071	182.0	48,893	126.8	40,929	103.3	29,490	82.7
PECULIAR	24,249	48.0	2,020	4.0	0	0	1,010	2.0
COMMON	68,822	134.0	46,873	122.8	40,929	103.3	28,480	80.7
BASE	37,058	78.0	13,166	31.0	2,452	12.6	5,320	11.9
PECULIAR	24,249	48.0	2,020	4.0	0	0	1,010	2.0
COMMON	12,809	30.0	11,146	27.0	2,452	12.6	4,310	11.9
DEPOT	35,166	57.0	20,863	62.9	28,596	72.7	5,412	16.0
PECULIAR	0	0	0	0	0	0	0	0
COMMON	35,166	57.0	20,863	62.9	28,596	72.7	5,412	16.0
OVERHAUL	20,650	47.0	14,867	32.9	9,884	18.1	18,761	52.8
PECULIAR	0	0	0	0	0	0	0	0
COMMON	20,650	47.0	14,867	32.9	9,884	18.1	18,761	52.8
MDN TOTAL								
TOTAL	3,993,784	2,841.9	2,128,786	1,535.4	4,004,239	2,119.7	4,617,801	2,085.6
PECULIAR	404,498	399.0	584,744	207.0	995,455	227.0	616,903	261.0
COMMON	3,589,285	2,442.9	1,544,041	1,328.4	3,008,782	1,892.7	4,000,897	1,824.6
BASE	257,529	364.8	429,875	214.0	59,528	122.0	99,708	146.1
PECULIAR	119,181	154.0	350,466	54.0	135	11.0	7,182	11.0
COMMON	138,367	210.8	79,408	161.0	59,391	111.0	92,526	135.1
DEPOT	1,549,005	1,086.8	796,478	591.2	2,067,003	1,079.8	2,194,226	907.5
PECULIAR	114,312	65.0	78,046	54.0	497,660	108.0	294,038	120.0
COMMON	1,434,693	1,021.8	718,430	537.2	1,569,341	971.8	1,900,186	787.5
OVERHAUL	2,387,259	1,390.4	902,440	710.3	1,877,711	917.9	2,323,872	1,032.1
PECULIAR	151,026	180.0	156,232	100.0	497,660	108.0	315,683	130.0
COMMON	2,036,231	1,210.4	746,206	610.3	1,380,049	809.9	2,008,187	902.1

Table C.22
FLYING HOUR MATERIEL PROGRAM, CONDEMNATION RATIOS BY SUBSYSTEM AND ITEM TYPE

	MODEL/DESIGN/SERIES A007D															
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978				
SCONDEM/SSPARES (X100)																
TOTAL (19785)	1.81	1.11	1.88	2.75	.50	.38	.22	.26	.14	.14	.12	.43	1.30	.81	1.21	1.66
PECULIAR	2.70	1.61	3.00	4.64	.54	.19	.07	.07	.14	.14	.12	.43	1.79	.99	1.74	2.44
COMMON	.33	.39	.21	.15	.40	.71	.49	.64	.0	.0	.0	.0	.35	.50	.31	.32
#CONDEM/#SPARES (X100)																
TOTAL	3.36	2.15	4.84	6.24	.61	.56	.42	.28	4.06	5.47	3.44	6.30	2.30	1.51	2.77	3.40
PECULIAR	3.26	1.85	5.32	7.72	.72	.34	.17	.21	4.06	5.47	3.44	6.30	2.59	1.41	3.51	4.92
COMMON	3.70	3.13	3.37	1.85	.53	.78	.63	.35	.0	.0	.0	.0	1.76	1.68	1.55	.86

	MODEL/DESIGN/SERIES A010A															
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978				
SCONDEM/SSPARES (X100)																
TOTAL (19785)	2.87	.04	.58	.91	.37	.27	.48	.44	.0	.0	.0	6.14	2.17	.05	.49	.93
PECULIAR	.0	.0	.0	.31	.0	.0	.0	.37	.0	.0	.0	6.14	.0	.0	.0	.75
COMMON	2.92	4.88	5.33	4.51	.37	.34	.78	.52	.0	.0	.0	.0	2.20	1.29	1.29	1.31
#CONDEM/#SPARES (X100)																
TOTAL	8.32	1.32	5.68	5.30	1.02	.31	1.13	.60	.0	.0	.0	4.62	7.79	1.18	3.35	3.28
PECULIAR	.0	.0	.0	.33	.0	.0	.0	.23	.0	.0	.0	4.62	.0	.0	.0	.64
COMMON	8.90	27.93	28.82	25.82	1.02	.38	1.61	.74	.0	.0	.0	.0	8.40	9.26	8.12	7.03

Table C.23
FLYING HOUR MATERIEL PROGRAM, CONDEMNATION RATIOS BY SUBSYSTEM AND ITEM TYPE

	MODEL/DESIGN/SERIES B052D															
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
\$CONDEM/\$SPARES (X100)																
TOTAL(1978\$)	8.19	4.40	5.01	3.52	4.45	2.26	6.23	1.42	3.61	3.52	2.68	3.55	6.00	3.17	5.68	2.27
PECULIAR	6.95	4.11	3.91	3.75	6.17	1.09	.36	.15	.0	.0	.0	.32	6.64	2.82	1.85	2.38
COMMON	8.39	4.46	5.23	3.42	4.32	2.37	7.14	1.56	3.61	3.52	3.03	4.00	5.94	3.21	6.33	2.24
#CONDEM//SPARES (X100)																
TOTAL	5.36	5.87	6.24	5.00	5.11	3.29	3.84	3.72	5.02	4.46	2.62	2.86	5.24	4.66	4.93	4.32
PECULIAR	5.54	2.63	2.25	3.53	2.95	.75	3.59	1.63	.0	.0	.0	1.68	4.19	1.53	2.89	2.75
COMMON	5.35	6.17	6.67	5.31	5.34	3.71	3.88	4.06	5.02	4.46	2.74	2.91	5.32	5.03	5.17	4.60

	MODEL/DESIGN/SERIES B052G															
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
\$CONDEM/\$SPARES (X100)																
TOTAL(1978\$)	11.42	4.82	9.78	5.51	1.64	1.60	2.56	2.20	4.68	3.52	2.92	4.20	5.30	2.78	4.93	3.24
PECULIAR	18.25	4.93	21.87	4.36	.36	.29	.06	.05	3.97	2.93	1.57	1.81	12.06	3.33	13.73	2.90
COMMON	8.88	4.79	4.90	6.03	1.74	1.69	2.73	2.35	5.19	3.80	6.56	10.75	4.06	2.70	3.36	3.30
#CONDEM/#SPARES (X100)																
TOTAL	8.87	8.31	8.89	8.58	3.10	3.14	4.40	4.39	13.64	9.56	8.44	9.19	5.72	5.31	6.04	5.91
PECULIAR	16.98	7.22	9.97	6.00	.50	.49	.18	.25	29.32	18.38	9.94	8.72	10.88	5.64	6.17	4.01
COMMON	8.37	8.38	8.82	8.74	3.21	3.23	4.52	4.51	10.69	8.10	7.94	9.35	5.44	5.29	6.03	5.99

Table C.24

	MODEL/DESIGN/SERIES B052H											
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL		
	1975	1976	1977 1978	1975	1976	1977 1978	1975	1976	1977 1978	1975	1976	1977 1978
<u>\$CONDEN/SPARES (X100)</u>												
TOTAL(1978\$)	8.69	7.25	4.50 4.82	1.83	1.60	2.26 1.74	3.31	1.62	3.04 5.21	4.47	3.67	3.02 2.66
PECULIAR	2.36	1.94	2.26 2.48	2.33	1.18	.44 .55	.0	.0	8.43 16.02	2.34	1.45	1.11 1.29
COMMON	11.38	9.50	5.44 5.84	1.63	1.80	2.89 2.08	3.31	1.64	2.57 3.03	5.34	4.62	3.73 3.11
<u>#CONDEN/SPARES (X100)</u>												
TOTAL	9.09	8.86	8.87 8.46	2.79	2.97	4.44 3.99	8.14	4.96	4.14 6.70	5.80	5.61	6.20 5.68
PECULIAR	9.56	7.14	6.29 5.50	2.54	.77	1.50 .31	.0	.0	4.05 15.92	6.73	4.47	4.30 3.49
COMMON	9.00	9.21	9.36 9.04	2.82	3.20	4.68 4.32	8.15	5.34	4.16 3.91	5.67	5.77	6.44 5.97

MODEL/DESIGN/SERIES COO5A																
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
<u>\$CONDEN/\$SPARES (X100)</u>																
TOTAL(1978\$)	3.32	2.09	3.68	3.90	1.73	1.58	1.82	1.05	1.86	1.36	.97	5.60	2.87	1.92	3.06	3.02
PECULIAR	3.32	2.07	3.63	3.83	1.72	1.59	1.83	1.02	1.86	1.36	.97	5.60	2.88	1.91	3.03	2.96
COMMON	2.77	3.37	6.14	7.03	2.43	1.25	.53	3.50	.0	.0	.0	.0	2.70	2.92	5.08	6.34
<u>#CONDEN/#SPARES (X100)</u>																
TOTAL	7.92	12.00	12.08	12.33	2.21	2.74	2.60	1.44	3.76	3.20	3.13	2.46	6.98	10.43	10.41	10.32
PECULIAR	8.02	12.18	12.39	12.73	2.10	2.80	2.70	1.50	3.76	3.20	3.13	2.46	7.06	10.60	10.68	10.67
COMMON	5.68	7.52	6.77	5.79	3.81	1.76	1.07	.65	.0	.0	.0	.0	5.24	6.22	5.74	4.76

Table C.25
FLYING HOUR MATERIEL PROGRAM, CONDEMNATION RATIOS BY SUBSYSTEM AND ITEM TYPE

MODEL/DESIGN/SERIES KC135A																
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
#CONDEM/SPARES (X100)																
TOTAL(1978\$)	8.56	7.64	8.81	7.67	3.38	.68	.49	.39	6.02	4.82	4.44	8.52	6.63	4.93	6.00	5.17
PECULIAR	10.53	13.11	11.63	13.31	3.14	.23	.94	.0	27.42	7.47	14.80	16.20	6.96	4.67	7.74	8.49
COMMON	8.50	7.55	8.76	7.53	3.39	.71	.48	.40	5.82	4.80	4.15	8.31	6.61	4.93	5.97	5.08
#CONDEM/SPARES (X100)																
TOTAL	14.38	14.46	15.98	15.20	3.42	1.08	1.22	.82	11.82	10.52	8.55	11.15	10.98	10.06	11.35	10.08
PECULIAR	35.36	26.90	8.42	23.75	1.65	.90	.26	.0	19.30	5.17	9.37	9.04	27.63	20.36	7.74	20.10
COMMON	13.70	14.07	16.35	14.86	3.46	1.09	1.23	.83	11.71	10.60	8.53	11.19	10.52	9.80	11.48	9.80

MODEL/DESIGN/SERIES C141A																
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
SCONDEM/\$SPARES (X100)																
TOTAL(1978\$)	4.02	3.65	4.80	3.30	1.85	.86	.49	1.22	11.02	8.36	6.36	5.49	3.49	2.84	3.41	2.67
PECULIAR	5.00	4.53	6.10	4.31	2.61	1.20	.42	3.43	13.16	9.98	7.64	6.43	4.82	4.33	5.14	4.22
COMMON	1.51	1.50	1.47	1.42	1.47	.78	.52	.35	.33	.01	.24	.95	1.48	1.07	.94	.88
#CONDEM/##SPARES (X100)																
TOTAL	6.96	9.49	9.74	7.27	3.10	1.75	.89	.89	16.18	11.19	10.91	12.12	6.50	7.78	7.72	6.04
PECULIAR	7.49	8.62	9.48	8.06	4.18	1.01	1.11	1.83	17.87	12.40	12.28	13.44	7.83	8.29	8.92	7.83
COMMON	5.57	11.63	10.37	5.94	2.78	1.92	.82	.64	1.47	.07	.95	1.67	4.31	7.03	5.93	3.91

Table C.26

FLYING HOUR MATERIEL PROGRAM, CONDEMNATION RATIOS BY SUBSYSTEM AND ITEM TYPE

MODEL/DESIGN/SERIES F004C																
AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL				
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
<u>\$CONDEN/ΣSPARES. (X100)</u>																
TOTAL(1978\$)	2.82	2.46	4.90	4.66	2.70	2.38	1.40	1.40	6.26	4.62	7.20	7.27	2.81	2.45	3.83	3.39
PECULIAR	7.28	7.70	18.42	10.49	2.28	1.76	1.30	.82	.0	.0	.0	.0	4.18	3.99	7.81	3.60
COMMON	2.15	1.63	2.99	3.70	3.08	2.93	1.48	2.03	6.57	4.85	7.55	7.70	2.40	1.96	2.70	3.30
<u>#CONDEN/#SPARES. (X100)</u>																
TOTAL	3.36	3.34	6.57	9.91	3.10	3.15	2.16	1.76	14.63	10.71	20.45	15.93	3.50	3.42	5.37	6.56
PECULIAR	3.45	2.72	5.25	4.20	4.31	4.06	1.56	.77	.0	.0	.0	.0	3.79	3.26	3.60	2.03
COMMON	3.35	3.44	6.76	10.87	2.83	2.94	2.30	1.95	16.23	11.86	23.03	18.28	3.46	3.45	5.67	7.84

MODEL/DESIGN/SERIES RF004C											
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL	
	1975	1976	1977 1978	1975	1976	1977 1978	1975	1976	1977 1978	1975	1976 1977 1978
\$CONDEN/\$SPARES (X100)											
TOTAL(1978\$)	2.50	1.57	3.01 3.76	2.81	1.75	1.07 1.68	6.57	4.85	7.52 7.70	2.70	1.69 1.84 2.48
PECULIAR	3.19	.90	1.24 2.07	2.26	1.19	.71 1.09	.0	.0	.0 .0	2.35	1.16 .76 1.19
COMMON	2.41	1.66	3.24 4.00	4.04	2.90	1.83 2.77	6.57	4.85	7.52 7.70	2.99	2.14 2.76 3.55
#CONDEN/#SPARES (X100)											
TOTAL	3.89	4.11	7.03 10.41	4.33	2.47	2.15 2.07	16.29	11.89	22.76 18.13	4.28	3.51 5.25 6.92
PECULIAR	4.61	1.65	2.97 2.85	4.89	2.08	1.85 2.20	.0	.0	.0 .0	4.83	2.00 2.07 2.33
COMMON	3.82	4.39	7.44 11.32	3.81	2.95	2.49 1.93	16.29	11.89	22.76 18.13	4.10	4.17 6.44 8.77

Table C.27
FLYING HOUR MATERIEL PROGRAM, CONDEMNATION RATIOS BY SUBSYSTEM AND ITEM TYPE

	MODEL/DESIGN/SERIES F004D															
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
<u>\$CONDEM/\$SPARES (X100)</u>																
TOTAL(1978\$)	2.12	1.89	2.99	3.73	1.78	1.79	1.71	1.67	6.59	4.87	7.55	7.70	1.99	1.86	2.42	2.66
PECULIAR	2.60	10.79	5.27	5.43	1.22	1.63	2.36	2.12	.0	.0	.0	.0	1.28	2.01	2.45	2.23
COMMON	2.11	1.70	2.96	3.69	2.35	1.98	.98	1.20	6.59	4.87	7.55	7.70	2.22	1.81	2.41	2.84
<u>#CONDEM/#SPARES (X100)</u>																
TOTAL	3.56	4.29	6.87	10.83	2.31	2.05	1.84	1.41	16.39	11.97	23.03	18.28	3.23	3.46	4.96	6.28
PECULIAR	1.75	4.07	2.26	2.86	1.36	1.55	2.69	1.84	.0	.0	.0	.0	1.38	1.67	2.67	1.88
COMMON	3.57	4.29	6.91	10.91	2.62	2.26	1.49	1.25	16.39	11.97	23.03	18.28	3.46	3.73	5.30	6.98

	MODEL/DESIGN/SERIES F004E															
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
<u>\$CONDEM/\$SPARES (X100)</u>																
TOTAL(1978\$)	1.99	1.52	1.87	3.51	2.17	1.33	.88	.56	6.56	4.84	7.61	7.82	2.10	1.47	1.50	1.98
PECULIAR	.49	1.44	2.24	6.36	2.07	1.04	.81	.48	.0	.0	.0	.0	1.82	1.10	1.00	1.31
COMMON	2.11	1.53	1.85	3.35	2.27	1.63	.97	.59	6.56	4.84	7.61	7.82	2.20	1.59	1.68	2.12
<u>#CONDEM/#SPARES (X100)</u>																
TOTAL	3.48	4.40	7.00	12.74	2.72	2.34	1.41	1.60	16.26	11.85	22.81	18.23	3.41	3.74	5.07	7.38
PECULIAR	1.87	3.13	5.90	8.41	4.43	4.05	1.83	.82	.0	.0	.0	.0	3.99	3.89	2.37	2.34
COMMON	3.54	4.44	7.04	12.90	2.10	1.75	1.23	1.73	16.26	11.85	22.81	18.23	3.32	3.72	5.51	7.87

Table C.28
FLYING HOUR MATERIEL PROGRAM, CONDEMNATION RATIOS BY SUBSYSTEM AND ITEM TYPE

	MODEL/DESIGN/SERIES F015A															
	AIRFRAME				AVIONICS				PROPULSION				RDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
<u>\$CONDEN/SSPARES (X100)</u>																
TOTAL(1978\$)	.0	.96	.11	1.25	.01	.02	4.00	.87	.0	.01	.0	5.37	.01	.38	1.97	1.19
PECULIAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
COMMON	.0	.99	.11	1.25	.01	.02	4.00	.87	.0	.01	.0	5.37	.01	.39	1.99	1.19
<u>#CONDEN/SSPARES (X100)</u>																
TOTAL	.01	2.85	.15	5.95	.18	.13	1.68	1.01	.0	.23	.0	5.75	.06	2.16	.47	4.70
PECULIAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
COMMON	.01	2.91	.15	5.99	.18	.13	1.69	1.01	.0	.24	.0	5.76	.07	2.21	.47	4.72

	MODEL/DESIGN/SERIES TF015A															
	AIRFRAME				AVIONICS				PROPULSION				RDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
<u>\$CONDEN/SSPARES (X100)</u>																
TOTAL(1978\$)	.0	.9	.10	1.14	.01	.02	4.01	.87	.0	.08	.0	4.92	.01	.38	1.90	1.13
PECULIAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	20.02	.0	.0	.0	.15	.0	.0
COMMON	.0	.96	.11	1.14	.01	.02	4.01	.87	.0	.01	.0	4.93	.01	.38	1.98	1.14
<u>#CONDEN/SSPARES (X100)</u>																
TOTAL	.01	2.80	.14	5.68	.18	.13	1.71	1.01	.0	1.21	.0	3.31	.06	2.18	.45	4.41
PECULIAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	20.00	.0	.0	.0	1.85	.0	.0
COMMON	.01	2.88	.15	5.80	.18	.13	1.71	1.01	.0	.24	.0	3.34	.07	2.19	.47	4.48

Table C.29
FLYING HOUR MATERIEL PROGRAM, CONDEMNATION RATIOS BY SUBSYSTEM AND ITEM TYPE

	MODEL/DESIGN/SERIES F016A															
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
<u>\$CONDEM/\$SPARES (X100)</u>																
TOTAL (1978\$)	.0	.21	.19	.11	.0	.33	.82	.16	.0	.0	.0	.0	.0	.27	.63	.15
PECULIAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
COMMON	.0	.21	.19	.11	.0	.33	.82	.16	.0	.0	.0	.0	.0	.27	.63	.15
<u>#CONDEM/#SPARES (X100)</u>																
TOTAL	.0	.92	1.31	.57	7.14	.23	2.01	.31	.0	.0	.0	.0	.35	.56	1.81	.39
PECULIAR	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
COMMON	.0	.92	1.31	.57	7.14	.23	2.01	.31	.0	.0	.0	.0	.35	.56	1.81	.39

	MODEL/DESIGN/SERIES F016B															
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
SCONDEM/\$SPARES (X100)																
TOTAL (1978\$)																
PECULIAR	.0	.0	.34	.14	.0	.0	.99	.16	.0	.0	.0	.0	.0	.0	.77	.16
COMMON	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
#CONDEM/#SPARES (X100)																
TOTAL																
PECULIAR	.0	.0	2.36	.54	.0	.0	2.32	.31	.0	.0	.0	.0	.0	.0	2.31	.39
COMMON	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
TOTAL																
PECULIAR	.0	.0	2.36	.54	.0	.0	2.32	.31	.0	.0	.0	.0	.0	.0	2.31	.39
COMMON	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

Table C.30
FLYING HOUR MATERIEL PROGRAM, CONDEMNATION RATIOS BY SUBSYSTEM AND ITEM TYPE

	MODEL/DESIGN/SERIES F111A															
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
SCONDEM/SSPARES (X100)																
TOTAL(1978\$)	3.29	3.11	2.02	1.72	3.18	1.78	1.27	.76	4.44	3.09	3.26	3.76	3.25	2.31	1.51	1.06
PECULIAR	1.09	.0	.11	.20	3.18	.63	2.49	2.08	.0	.0	.0	.0	2.59	.34	1.51	1.57
COMMON	3.59	4.37	2.55	1.93	3.18	2.07	1.07	.56	4.52	3.09	3.26	3.76	3.44	2.90	1.51	.99
#CONDEM/#SPARES (X100)																
TOTAL	7.80	8.07	4.80	3.61	4.39	3.20	3.69	2.85	8.45	5.12	4.76	5.98	6.18	5.68	4.26	3.30
PECULIAR	2.21	.0	.72	.48	2.59	1.52	.85	.92	.0	.0	.0	.0	2.43	.87	.81	.82
COMMON	9.02	9.91	5.32	3.82	4.98	3.81	4.54	3.35	8.54	5.12	4.76	5.98	7.15	7.02	4.96	3.67

	MODEL/DESIGN/SERIES F111D															
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
SCONDEM/SSPARES (X100)																
TOTAL(1978\$)	3.67	3.15	1.75	1.29	1.09	1.35	.81	.47	4.37	3.03	3.20	4.78	2.35	2.13	1.23	.83
PECULIAR	3.09	1.67	1.08	.65	.38	.54	.28	.27	.0	.0	.0	.0	1.54	1.10	.77	.50
COMMON	4.83	6.50	3.55	2.66	4.72	2.23	1.10	.57	4.37	3.03	3.20	4.78	4.79	3.60	1.71	1.13
#CONDEM/#SPARES (X100)																
TOTAL	10.07	11.31	6.00	3.58	5.44	4.27	4.08	3.11	8.71	5.32	4.83	6.56	8.05	8.23	5.20	3.48
PECULIAR	9.08	7.31	4.91	3.13	3.18	2.73	1.41	1.21	.0	.0	.0	.0	6.04	4.96	3.32	2.30
COMMON	10.42	12.56	6.36	3.73	6.68	5.06	5.21	3.88	8.71	5.32	4.83	6.56	8.89	9.45	5.87	3.88

Table C.31
FLYING HOUR MATERIEL PROGRAM, CONDEMNATION RATIOS BY SUBSYSTEM AND ITEM TYPE

	MODEL/DESIGN/SERIES F111F											
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL		
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
\$CONDEM/SSPARES (X100)												
TOTAL (1978\$)	5.89	6.15	1.25	1.57	5.26	2.18	3.48	2.46	3.62	2.92	2.69	3.84
PECULIAR	11.09	.82	.50	.03	.0	.05	.12	.0	.0	85.77	.0	.0
COMMON	4.89	7.15	2.56	1.87	6.69	2.66	4.29	3.20	3.80	1.02	2.69	3.85
#CONDEM/#SPARES (X100)												
TOTAL	16.00	12.88	5.96	3.23	5.66	4.78	5.41	4.01	8.19	4.73	3.59	6.03
PECULIAR	96.60	4.21	4.86	.49	.0	.35	1.36	.0	.0	42.86	.0	.0
COMMON	10.91	13.20	5.99	3.36	6.20	5.15	5.79	4.51	8.69	3.07	3.74	6.29
									8.78	9.59	5.84	3.87

	MODEL/DESIGN/SERIES T0378											
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL		
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
\$CONDEM/SSPARES (X100)												
TOTAL (1978\$)	3.69	4.79	3.90	2.19	5.53	.73	.34	.67	15.58	122.84	44.37	4.43
PECULIAR	3.53	2.76	5.56	6.43	.0	.0	.0	.0	3.93	159.11	.0	.0
COMMON	3.76	5.06	3.78	1.88	5.56	.73	.34	.68	68.45	44.32	45.88	4.50
#CONDEM/#SPARES (X100)												
TOTAL	3.45	3.43	3.96	2.89	4.42	.57	.25	.40	14.54	71.47	31.74	3.95
PECULIAR	4.27	2.12	1.22	3.95	.0	.0	.0	.0	3.28	155.48	.0	.0
COMMON	3.38	3.48	4.06	2.85	4.43	.57	.25	.40	26.00	23.34	32.43	4.04
									4.13	2.54	3.49	1.94

Table C.32
FLYING HOUR MATERIEL PROGRAM, CONDEMNATION RATIOS BY SUBSYSTEM AND ITEM TYPE

MODEL/DESIGN/SERIES TO38A																
	AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL			
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978
SCONDEM/\$SPARES (X100)																
TOTAL(1978\$)	4.29	3.76	7.43	7.54	8.94	.61	.29	.24	15.93	9.89	8.52	10.37	5.32	3.11	6.42	3.95
PECULIAR	9.84	17.77	30.94	16.96	.0	.0	.0	.0	19.45	2.64	.0	2.02	9.82	16.78	29.28	16.54
COMMON	3.91	2.84	5.91	6.92	9.02	.61	.29	.24	14.97	11.22	10.05	12.16	5.06	2.37	5.10	3.53
#CONDEM/#SPARES (X100)																
TOTAL	9.00	6.25	8.99	8.24	8.97	1.02	.36	.76	13.49	10.00	8.65	9.18	9.19	5.00	7.32	4.98
PECULIAR	11.50	8.05	9.13	10.44	.0	.0	.0	.0	22.22	2.41	.0	1.67	12.12	7.64	8.51	9.99
COMMON	8.59	6.00	8.98	7.97	9.00	1.02	.37	.76	11.82	11.14	10.03	10.34	8.84	4.75	7.20	4.65

Table C.33
FLYING HOUR MATERIEL PROGRAM, REPLACEMENT COSTS PER FLYING HOUR (1978\$)

MODEL/DESIGN/SERIES A007D																				
AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL								
1975 1976 1977 1978				1975 1976 1977 1978				1975 1976 1977 1978				1975 1976 1977 1978								
TOTAL				13	9	14	22	2	2	2	2	1	1	1	1	16	12	17	25	
PECULIAR				12	8	13	21	1	1	1	1	1	1	1	1	1	14	10	15	23
COMMON				1	1	1	1	1	1	1	1	0	0	0	0	0	2	2	2	2

MODEL/DESIGN/SERIES B052D																			
AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL							
1975 1976 1977 1978				1975 1976 1977 1978				1975 1976 1977 1978				1975 1976 1977 1978							
TOTAL				326	203	206	144	230	144	428	91	10	12	9	13	566	359	643	250
PECULIAR				38	33	27	43	22	6	1	1	0	0	0	1	60	39	30	45
COMMON				288	170	179	101	208	138	425	92	10	12	9	12	506	320	613	205

MODEL/DESIGN/SERIES B052G																			
AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL							
1975 1976 1977 1978				1975 1976 1977 1978				1975 1976 1977 1978				1975 1976 1977 1978							
TOTAL				216	99	221	130	52	59	116	118	8	7	5	6	276	165	342	254
PECULIAR				94	23	142	32	1	1	1	1	3	2	2	2	98	26	145	35
COMMON				122	76	79	98	51	58	115	117	5	5	3	4	178	139	197	219

MODEL/DESIGN/SERIES B052H																			
AIRFRAME				AVIONICS				PROPULSION				MDS TOTAL							
1975 1976 1977 1978				1975 1976 1977 1978				1975 1976 1977 1978				1975 1976 1977 1978							
TOTAL				187	177	113	118	62	66	111	101	3	2	2	2	252	245	226	221
PECULIAR				15	14	17	18	23	15	6	7	0	0	1	1	18	29	24	26
COMMON				172	163	96	100	39	51	105	94	3	2	1	1	214	216	202	195

Table C.34
FLYING HOUR MATERIEL PROGRAM, REPLACEMENT COSTS PER FLYING HOUR (1978\$)

MODEL/DESIGN/SERIES C005A																
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL						
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978				
TOTAL	141	100	154	181	28	37	37	22	1	1	1	2	170	138	192	205
PECULIAR	139	98	149	174	27	36	36	21	1	1	1	2	167	135	186	197
COMMON	2	2	5	7	1	1	1	1	0	0	0	0	3	3	6	8

MODEL/DESIGN/SERIES KCL15A																
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL						
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978				
TOTAL	68	70	97	78	16	5	3	2	5	6	5	9	89	81	105	89
PECULIAR	2	2	2	3	1	1	1	0	1	1	1	1	4	4	4	4
COMMON	66	68	95	75	15	4	2	2	4	5	4	8	85	77	101	85

MODEL/DESIGN/SERIES C141A																
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL						
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978				
TOTAL	35	32	43	34	8	4	3	6	4	3	3	2	47	39	49	42
PECULIAR	31	28	39	29	4	1	1	5	3	2	2	1	38	31	42	35
COMMON	4	4	4	5	4	3	2	1	1	1	1	1	9	8	7	7

MODEL/DESIGN/SERIES F004C																
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL						
	1975	1976	1977	1978	1975	1976	1977	1978	1975	1976	1977	1978				
TOTAL	39	39	78	67	17	18	10	13	1	1	1	2	57	58	89	82
PECULIAR	13	17	36	21	7	6	4	4	0	0	0	0	20	23	40	25
COMMON	26	22	42	46	10	12	6	9	1	1	1	2	37	35	49	57

Table C.35
FLYING HOUR MATERIEL PROGRAM, REPLACEMENT COSTS PER FLYING HOUR (1978\$)

MODEL/DESIGN/SERIES RF004C									
	AIRFRAME			AVIONICS			PROPULSION		
	1975	1976	1977	1978	1975	1976	1977	1978	MDS TOTAL
TOTAL	33	23	45	51	53	39	26	38	1 1 1 2 87 63 72 91
PECULIAR	5	2	2	4	29	18	12	16	0 0 0 0 34 20 14 20
COMMON	28	21	43	47	24	21	14	22	1 1 1 2 53 43 58 71

MODEL/DESIGN/SERIES F004D									
	AIRFRAME			AVIONICS			PROPULSION		
	1975	1976	1977	1978	1975	1976	1977	1978	MDS TOTAL
TOTAL	28	27	44	50	20	24	23	26	1 1 1 2 49 52 68 78
PECULIAR	1	3	1	2	7	12	17	17	0 0 0 0 8 15 18 19
COMMON	27	24	43	48	13	12	6	9	1 1 1 2 41 37 50 59

MODEL/DESIGN/SERIES F004E									
	AIRFRAME			AVIONICS			PROPULSION		
	1975	1976	1977	1978	1975	1976	1977	1978	MDS TOTAL
TOTAL	25	19	24	34	20	13	8	7	1 1 1 2 46 33 33 43
PECULIAR	1	1	2	3	10	5	4	2	0 0 0 0 11 6 6 5
COMMON	24	18	22	31	10	8	4	5	1 1 1 2 35 27 27 38

MODEL/DESIGN/SERIES F111A									
	AIRFRAME			AVIONICS			PROPULSION		
	1975	1976	1977	1978	1975	1976	1977	1978	MDS TOTAL
TOTAL	118	168	107	98	98	151	149	104	3 3 3 4 219 322 259 206
PECULIAR	5	0	1	1	35	11	41	38	0 0 0 0 40 11 42 39
COMMON	113	168	106	97	63	140	108	66	3 3 3 4 179 311 217 167

Table C.36
FLYING HOUR MATERIEL PROGRAM, REPLACEMENT COSTS PER FLYING HOUR (1978\$)

MODEL/DESIGN/SERIES F111D										
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL
	1975	1976	1977	1978	1975	1976	1977	1978	1975	
	1975	1976	1977	1978	1975	1976	1977	1978	1975	
TOTAL	265	275	186	145	84	157	112	73	3	352
PECULIAR	149	101	83	50	24	32	13	14	0	173
COMMON	116	174	103	95	60	125	99	59	3	179

MODEL/DESIGN/SERIES F111F										
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL
	1975	1976	1977	1978	1975	1976	1977	1978	1975	
	1975	1976	1977	1978	1975	1976	1977	1978	1975	
TOTAL	167	177	71	65	82	40	65	59	2	251
PECULIAR	51	4	2	1	0	1	1	0	0	51
COMMON	116	173	69	64	82	39	64	59	2	200

MODEL/DESIGN/SERIES T017B										
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL
	1975	1976	1977	1978	1975	1976	1977	1978	1975	
	1975	1976	1977	1978	1975	1976	1977	1978	1975	
TOTAL	2	3	3	2	1	1	1	1	2	7
PECULIAR	1	1	1	1	0	0	0	0	1	2
COMMON	1	2	2	1	1	1	1	1	1	5

MODEL/DESIGN/SERIES T018A										
	AIRFRAME			AVIONICS			PROPULSION			MDS TOTAL
	1975	1976	1977	1978	1975	1976	1977	1978	1975	
	1975	1976	1977	1978	1975	1976	1977	1978	1975	
TOTAL	6	6	12	15	3	1	1	1	2	11
PECULIAR	1	2	3	2	0	0	0	0	1	2
COMMON	5	4	9	13	3	1	1	1	1	9

Appendix D
INSTRUCTIONS FOR USING THE PROGRAM "INVESTMENT PREDICTIONS
AND CONFIDENCE INTERVALS"

The program consists of four decks of cards:

1. A FORTRAN deck of about 200 cards with letters, numbers, and symbols.
2. A data deck of about 200 cards with numbers only, called the "unit 10" data deck.
3. A data deck consisting of six cards with numbers only, called the "unit 11" data deck.
4. An input data deck of three cards with numbers and letters containing aircraft specifications which is called the "unit 5" data deck. The last card of this deck is completely blank. This is the *only* data deck to be altered by the user.

To use this program, the FORTRAN deck must be compiled with a FORTRAN compiler, then run with the three data decks. Initially it is important for the user to be assisted by someone familiar with FORTRAN because different installations (systems) maintain different conventions. Once the program works, save it for future reference. Work with a copy so that inputs may be changed as desired using input data deck "unit 5." Any number of specification sets may be processed in a single run; just use the same format as the two specification sets (each card of "unit 5" specifies an aircraft; in the deck supplied, Card 1 contains the specification set of one of the sample aircraft, and Card 2 contains the specification set of the aircraft to be estimated).

The format to be used is described in the FORTRAN program reproduced here. Remember to use a decimal point with every number. The program produces one page of output for each aircraft specification set (set of inputs). An output page corresponding to the C-X specification set (Card 2 of unit 5) is reproduced below.

The remainder of this section is directed to the user with FORTRAN familiarity. The FORTRAN program has been checked out with the IBM

level G FORTRAN IV compiler. The program is expected to run as written but there could be some unexpected differences such as with the magnitude or precision of the data allowed.

The program requires access to three FORTRAN units (10, 11, and the standard unit 5). These correspond to the names attached to the data decks in the first part of this appendix. The user makes changes only in unit 5. All three data decks should be in card-image format (record length 72 or 80).

```
// EXEC FORTGCG,REGG=90K
//FORT.SYSIN DD *
```

```
C
C THIS PROGRAM COMPUTES PREDICTIONS AND THEIR CONFIDENCE
C INTERVALS FOR USAF RECOVERABLE SPARES INVESTMENT IN PEACETIME
C OPERATING STOCK (POS) AND REPLENISHMENT OF CONDEMNATIONS
```

```
C
C CREATION DATE: 23 JANUARY 1980
C CREATED BY: PATTI MASTHAY AND BILL ROGERS
C THE RAND CORPORATION
C (PHONE: 213-393-0411)
C (EXTENSIONS: 7540 OR 665)
C
```

```
C
C IMPLICIT REAL*8 (A-H, P-Z)
C DIMENSION X(10)
```

```
C
C THE INDEPENDENT VARIABLES ARE READ INTO THE PROGRAM FROM UNIT 12.
C ALL THE INPUT VARIABLES REQUIRE A DECIMAL POINT.
C THEY CAN BE PLACED IN ANY POSITION IN THEIR SPECIFIED FIELDS.
C THE FIELDS ARE SPECIFIED BY THE BEGINNING AND ENDING COLUMN
C NUMBERS FOR EACH VARIABLE.
```

C	COLUMNS	VARIABLE	DESCRIPTION
C	1 - 10	AFFAC	AIRFRAME FLYAWAY COST (1978\$)
C	11 - 20	AVFAC	AVIONICS FLYAWAY COST (1978\$)
C	21 - 30	PFAC	PROPULSION FLYAWAY COST (1978\$)
C	31 - 35	AC	NUMBER OF AIRCRAFT
C	36 - 40	TYPE	TYPE OF AIRCRAFT(DEFINES INDICATOR)
C			1 = FIGHTER/ATTACK
C			2 = BOMBER
C			3 = CARGO
C			4 = TANKER
C			5 = RECCON
C			6 = TRAINER
C	41 - 45	E	TOTAL NUMBER OF ENGINES
C	46 - 53	PFH	PEAK FLYING HOURS PER AIRCRAFT
C	54 - 61	AFOFMT	AIRFRAME MEAN OFMTDR
C	62 - 69	POFMT	PROPULSION MEAN OFMTDR

```
C
C ESTIMATES ARE BASED ON RAND R-2552-PA&E. SEE THAT REPORT FOR A
C COMPLETE DESCRIPTION OF THE INPUTS.
```

```
C
1 READ (5,100,END=999) AFFAC, AVFAC, PFAC, AC, TYPE, E,
  &PFH, AFOFMT, POFMT
100 FORMAT (3F10.0,3F5.0,3F8.0)
```

```
C
C UNIT 10 CONTAINS THE DATA FOR THE VARIANCE-COVARIANCE MATRIX.
C THIS MATRIX AND THE RELATED VARIABLES FROM THIS DATASET WERE
C GENERATED AT RAND AND ARE NOT TO BE CHANGED BY THE USER.
```



```
C
  REWIND 10
C
C  UNIT 11 CONTAINS THE STRUCTURAL CORRECTION FACTORS CAUSED
C  BY THE VARIANCE COMPONENT STRUCTURE OF THE DATA THAT WERE
C  USED TO CREATE THE REGRESSION COEFFICIENTS.
C  THESE DATA ARE NOT TO BE CHANGED BY THE USER.
C
  REWIND 11
  K = 1
C
C  PRINT HEADINGS OF OUTPUT.
C
  WRITE (6,102)
102  FORMAT (1H1,////,9X,'INVESTMENT PREDICTIONS AND CONFIDENCE',
    &' INTERVALS',
    &//22X,'AIRCRAFT RECOVERABLE SPARES',//)
  WRITE (6,103)
103  FORMAT (1X,'PEACETIME OPERATION STOCK'//25X,'LOG ESTIMATE',14X,
    &'DOLLAR ESTIMATE(MIL)'//20X,'LOG COST',5X,'STD ERROR',9X,'COST',
    &6X,'COST UPPER'/63X,'BOUNDS',//)
  5  IF (K .EQ. 4) WRITE (6,104)
104  FORMAT (1X,'REPLENISHMENT OF CONDEMNATIONS'//25X,'LOG ESTIMATE',
    &14X,'DOLLAR ESTIMATE(MIL)'//20X,'LOG COST',5X,'STD ERROR',9X,
    &'COST',6X,'COST UPPER'/63X,'BOUNDS',//)
    GO TO (10, 20, 30, 10, 20, 40), K
C
C  VARIABLE K INDICATES THE REGRESSION TO BE USED.
C  THE INDEPENDENT VARIABLES ARE ORDERED IN THE SAME ORDER AS
C  THOSE USED TO CREATE THE VARIANCE-COVARIANCE MATRIX.
C  THE X ARRAY INDICATES THIS ORDER.
C  NO VALUE IS NEEDED FOR THE DEPENDENT VARIABLE SINCE THAT VALUE
C  IS CALCULATED AS THE PREDICTED VALUE OF Y.
C
10  X(2) = DLOG (AC)
    X(3) = DLOG (AFFAC)
    X(4) = DLOG (PFH)
    X(5) = DLOG (AFOFMT)
    CALL FRCST (YEST,YSTD,VAR,VY,VYS,X)
C
C  YEST - THE PREDICTED VALUE OF Y (YHAT)
C  VSTD - PLACEHOLDER FOR STATLIB ROUTINE
C  VAR - VARIANCE OF Y GIVEN X
C  VY - STANDARD ERROR OF (Y - YHAT)
C  VYS - VARIANCE OF THE PREDICTED Y  VAR(YHAT -E(YHAT))
C  X - AN ARRAY OF INDEPENDENT VARIABLES
C
  XLGCST = YEST
  STERR = VY
  COST = (DEXP (YEST + VAR/2.0))/1.0D6
  COSTUB = (DEXP (YEST + VY))/1.0D6
```

```
C
C  XLGCST - THE PREDICTED VALUE OF THE LOGCOST
C  STERR - THE STANDARD ERROR OF THE LOGCOST
C  COST - THE DOLLAR ESTIMATE (IN MILLIONS) OF THE COST
C          NOTE, THIS IS THE EXPECTED VALUE OF THE COST, WHICH IS
C          FITTED BY A LOGNORMAL DISTRIBUTION.
C  COSTUB - THE UPPER CONFIDENCE BOUND OF THE COST (THE UPPER BOUND
C          FALLS BELOW THE ACTUAL COST WITH PROBABILITY 0.16)
C  THE UPPER BOUND CONFIDENCE LIMIT CAN BE CHANGED TO
C  INCLUDE ANY PERCENTAGE BY INSERTING A VARIABLE INDICATING
C  THE PERCENTAGE AND USING THE SUBROUTINE PHI INVERSE TO
C  OBTAIN A FACTOR WHICH IS MULTIPLIED BY VY.
C
      WRITE (6,101) XLGCST, STERR, COST, COSTUB
101  FORMAT (4X,'AIRFRAME',2X,2F14.2,2F14.3/)
      K = K + 1
      GO TO 5
20   DO 25 I=2,6
25   X(I) = 0.0
      ITYPE = TYPE + 1.0
      IF (TYPE .GE. 1.0 .AND. TYPE .LE. 5.0) X(ITYPE) = 1.0
      X(7) = DLOG (AC)
      X(8) = DLOG (AVFAC)
      CALL FRCST (YEST,YSTD,VAR,VY,VYS,X)
      XLGCST = YEST
      STERR = VY
      COST = (DEXP (YEST + VAR/2.0))/1.0D6
      COSTUB = (DEXP (YEST + VY))/1.0D6
      WRITE (6,105) XLGCST, STERR, COST, COSTUB
105  FORMAT (4X,'AVIONICS',2X,2F14.2,2F14.3/)
      K = K + 1
      GO TO 5
30   X(2) = DLOG (PFAC)
      X(3) = DLOG (E)
      CALL FRCST (YEST,YSTD,VAR,VY,VYS,X)
      XLGCST = YEST
      STERR = VY
      COST = (DEXP (YEST + VAR/2.0))/1.0D6
      COSTUB = (DEXP (YEST + VY))/1.0D6
      WRITE (6,106) XLGCST, STERR, COST, COSTUB
106  FORMAT (4X,'PROPULSION',2F14.2,2F14.3///)
      K = K + 1
      GO TO 5
```

```

40  X(2) = DLOG (PFAC)
    X(3) = DLOG (E)
    X(4) = DLOG (POFMT)
    CALL FRCST (YEST, YSTD, VAR, VY, VYS, X)
    XLGCST = YEST
    STERR = VY
    COST = (DEXP (YEST + VAR/2.0))/1.0D6
    COSTUB = (DEXP (YEST + VY))/1.0D6
    WRITE (6,106) XLGCST, STERR, COST, COSTUB
    WRITE (6,107) AFFAC,AVFAC,PFAC,AC,PFH,AFOFMT,TYPE,E,POFMT
107  FORMAT (5X,'INPUT VARIABLES'//10X,'AFFAC = ',F10.0/10X,'AVFAC = ',
&F10.0/10X,'PFAC = ',F10.0/10X,'AC = ',F5.0/10X,'PFH(PER AC) = ',
&F7.2/10X,'OFMTDR(AF) = ',F7.4/10X,'TYPE = ',F5.1/10X,'E = ',
&F5.0/10X,'OFMTDR(P) = ',F7.4//)
    GO TO 1
999  CONTINUE
    STOP
    END

```

```

    FUNCTION SYMDOT (J1, JJ, RM1, I1, RM2, I2)
    IMPLICIT REAL*8 (A-H, P-Z)
    DIMENSION RM1(1), RM2(1)
C   MULTIPLIES ROW I2 OF TRIANGULARY STORED SYMMETRIC MATRIX M2
C   BY VECTOR M1
    SYMDOT=0D0
    DO 10 I = J1, JJ
    JU = MAX0(I,I2)
    INDX = JU*(JU-1)/2 + I + I2 - JU
10  SYMDOT = SYMDOT + RM1(I)*RM2(INDX)
    RETURN
    END

```

```

SUBROUTINE REGFOV(NV,NOBS,AVG,STD,KVAR,V,S2,X,YEST,VEY,VPY,Z,
.   B0,B,SW)
C
C   COMPUTES REGRESSION ESTIMATE, PREDICTION, AND FORECAST STD ERROR
C   DEFINE COMMON BLOCK CONTAINING ADDITIONAL PARAMETERS.
C
      IMPLICIT REAL*8(A-H,P-Z)
      LOGICAL OCON,OCONP,OBL,OWTD,OACCI,ODUM
      COMMON /REG001/ COFV,RHO,DUM(2),OCON,OCONP,OBL,OWTD,OACCI,ODUM(2),
.   MP,KLBL,KW,KWS,KWMODE,KDUM(2)
C
      DIMENSION AVG(1),STD(1),V(1),X(1),Z(1),KVAR(1),B(1)
      LOGICAL OFFPRT,OPAGE
      DATA BLANK/1H /,W/1.DO/,OFFPRT/.TRUE./
C
C   COMPUTE PREDICTED VALUE OF Y FROM REGRESSION.
C   X VALUES MUST BE STORED IN THE SAME POSITION AS IN
C   THE ORIGINAL MATRIX.
C
      YEST=B0
      NR=IABS(NV)-1
      DO 10 J = 1,NR
      JJ=KVAR(J)
10  YEST=YEST+B(JJ)*X(JJ)
C
C   COMPUTE VARIANCE OF THE PREDICTED VALUE
C
      IF(NV.EQ.0 .OR. NOBS.LT.2) RETURN
      IF(OWTD) W=W*X(KW)
      DO 20 I=1,NR
      KI=KVAR(I)
      TAVG=0.
      IF(OCONP) TAVG=AVG(KI)
20  Z(I)=(X(KI)-TAVG)/STD(KI)
      VEY=0.
      DO 30 I=1,NR
30  VEY=VEY+SYMDOT(1,NR,Z,0,V,I)*Z(I)
      VEY=S2*VEY
      IF(OCON) GO TO 35
      VEY=VEY/FLOAT(NOBS)
      GO TO 37
35  VEY=VEY/FLOAT(NOBS-1)
      IF(OCONP) VEY=VEY+S2/FLOAT(NOBS)
37  VPY=VEY+S2*SW/(FLOAT(NOBS)*W)
50  W=1.
      RETURN
      END

```

```

SUBROUTINE FRCST(YEST, YSTD,S2STAR,SVPY,SVY,X)
IMPLICIT REAL*8(A-H,P-Z)

C
C READS IN REGRESSION DATA AND SETS UP A CALL TO REGFOV.
C PERFORMS REQUIRED TRANSFORMATION OF THE RESULTS.
C
      LOGICAL OCON,OCONP,OBL,OWTD,OACCI,ODUM,
      . OACC,OCOR,OREG,OCON2,OCONP2,OBL2,OWTD2,ODUM2
      COMMON /REG001/ COFV,RHO,DUM(2),OCON,OCONP,OBL,OWTD,OACCI,ODUM(2),
      . MP,KLBL,KW,KWS,KWMODE,KDUM(2)
      COMMON /REG002/ KWMOD2,NVTS,NWS,NVT,NOBS,NR,NOBR,NOBF,NDV,KRCV,
      . KLBL2,KW2,KPRD,KRSD,KFPRD,KPSTD,KFSTD,KRSTD,KDF,KDUM2(5),
      . OACC,OCOR,OREG,OCON2,OCONP2,OBL2,OWTD2,ODUM2(3),
      . CTHR2,COFV2,RHO2, XNOBS,SWGTA,SWGT,B0,S2,RSDWK(6),VEY,VPY,
      . DNAM,DUM2(3), U(1),LU(1),JU, JINT,JLGL,JREAL, JXNAM,JSUM,
      . JAVG,JSTD,JB,JBU,JTEMP, JA,JC,JV,JR, JKVAR
      DIMENSION W(1000)
      INTEGER INTS(24), KVAR(30)
      LOGICAL OLOGS(10)
      REAL*8 RLS(20), X(30)
      EQUIVALENCE (INTS,KWMOD2), (OLOGS,OACC), (RLS,CTHR2)
      DIMENSION TEMP(30)

C DEFINE MACHINE-DEPENDENT CONSTANTS
C (WORD LENGTHS ARE BASED ON IBM 360 ARCHITECTURE)
      DATA LWADD/8/,NSWDWD/2/,LWORD/8/,LSWORD/4/

C READ IN REGRESSION INFORMATION
      READ(10,101) KWMOD2,NVTS,NWS,NVT,NOBS,NR,NOBR,NOBF,NDV,KRCV,
      . KLBL2,KW2,KPRD,KRSD,KFPRD,KPSTD,KFSTD,KRSTD,KDF,KDUM2,
      . OACC,OCOR,OREG,OCON2,OCONP2,OBL2,OWTD2,ODUM2
101 FORMAT (/12I6/12I6/10L1)
      NKVAR = (NVT+1)/2
      JJ = NWS - 37
      READ (10,108)
108 FORMAT (1X)
      READ(10,102) CTHR2,COFV2,RHO2, XNOBS,SWGTA,SWGT,
      . B0,S2,RSDWK,VEY,VPY,DNAM,DUM2,(W(J),J=1,JJ)
102 FORMAT (3D24.16)
      READ (10,108)
      READ (10,103) (KVAR(J),J=1,NR)
103 FORMAT (12I6)
      READ (11,104) VFF
104 FORMAT (F12.0)

C YOU MAY WANT TO LOG SOME OF THESE.
C DEFINE OFFSETS FOR IMPORTANT ACCUMULATION DATA.
      NVTS2=(NVTS*(NVTS+1))/2
      JXNAM=1
      JSUM=JXNAM+NVTS
      JREAL=JSUM

```

```
IF(KWMOD2.EQ.3) JAVG=JAVG+NVT5
JSTD=JAVG+NVT5
JB=JSTD+NVT5
JBU=JB+NVT5
JTEMP=JBU+NVT5
JA=JTEMP+NVT5
JC=JA
IF(KWMOD2.EQ.3) JC=JC+NVT2
JV=JC
IF(KWMOD2.GT.1) JV=JV+NVT2
JR=JV
IF(KWMOD2.EQ.3) JR=JR+NVT2
C  SET INFORMATION REQUIRED TO COMPUTE VARIANCES IN REGFOV
   OCON = OCON2
   OCONP = OCON2
   OWTD = .FALSE.
C  THIS CALL DOES THE MAIN WORK
   CALL REGFOV (NR, NOBS, W(JAVG), W(JSTD), KVAR, W(JV), S2,
.           X, YEST, VEY, VPY, TEMP, BO, W(JBU), SWGT)
   S2STAR=S2
   SVPY=DSQRT(VPY + (VFF -1.0D0)*VEY)
   SVY=VEY * VFF
   RETURN
   END
/*
//GO.FT05F001 DD DISP=SHR,DSN=M.M2895.A2826.DATA
//GO.FT10F001 DD DISP=SHR,DSN=M.M2895.A2826.MATDUMP
//GO.FT11F001 DD DISP=SHR,DSN=M.M2895.A2826.FACTOR
```